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AFY acre-feet per year	
in i ucio icoi poi youi	

AVA American Viticulture Area

Basin Plan Water Quality Control Plan for the Central Coastal Basin

BMP Best Management Practices

CBSM Community Based Social Marketing
CCWA Central Coast Water Authority

CDPH California Department of Public Health
CEQA California Environmental Quality Act

cfs cubic feet per second

CIP Capital Improvement Projects
CN Composite Runoff Curve Number

Conservation Districts

Coastal San Luis and Upper Salinas Las Tablas Resource Conservation Districts

County San Luis Obispo County, County of San Luis Obispo

CSA 16 County Service Area No. 16
CSD Community Services District
CWC California Water Code

DACs Disadvantaged Communities

Delta California Bay-Delta

District San Luis Obispo County Flood Control and Water Conservation District

DPHS Department of Public Health and Safety
DWR California Department of Water Resources

EIR Environmental Impact Report
GIS Geographic Information Systems

GPCD gallons per capita per day

GPD gallons per day
GPM gallons per minute

GWMP Groundwater Management Plan

IRWM Integrated Regional Water Management
IRWMP Integrated Regional Water Management Plan

IRWMP, IRWM Plan San Luis Obispo Regional Integrated Water Management Plan

LRM Load Reduction Modeling
MGD million gallons per day
MHI median household income
MOU Memorandum of Understanding

NPDES National Pollutant Discharge Elimination System

NRCS National Resource Conservation Service

Paso Basin Paso Robles Groundwater Basin

ppm parts per million

PRGBMP Paso Robles Groundwater Basin Management Plan

Proposal, SLO Proposal San Luis Obispo Regional Integrated Water Management Proposal

Acronyms, Continued

PVC polyvinyl chloride

RCD Resource Conservation District

Region San Luis Obispo County IRWM Region

Regional Agency San Luis Obispo County Flood Control and Water Conservation District

RMS Resource Management Strategies
RWMG Regional Water Management Group

RWQCB Central Coast Regional Water Quality Control Board

SEP Supplemental Environmental Project
SMCSD San Miguel Community Services District
SSCSD San Simeon Community Services District
STAC Stakeholder and Technical Advisory Committee

SWP State Water Project

SWP Statewide Priorities (only in Attachment 9)
SWRCB State Water Resources Control Board

TDS Total Dissolved Solids

TMDL Total Maximum Daily Loads
UCCE U.C. Cooperative Extension
USFWS U.S. Fish and Wildlife Service

WRAC Water Resources Advisory Committee

WTP Water Treatment Plant

WWTP Wastewater Treatment Plant

Chapter 1. Introduction and Regional Description

This chapter provides the essential information needed to encircle the San Luis Obispo Regional Integrated Water Management Proposal (Proposal) and describe each of the Proposal's project elements in terms of their purpose, goals and objectives. This also provides a closer look at the projects' descriptions, maps, and work completed to-date. This chapter provides the reader with an understanding of the readiness of the project to proceed if awarded grant funding through this Round 2 Proposal.

1.1 Introduction

Development of the San Luis Obispo IRWM Region (Region) Integrated Regional Water Management Plan (IRWMP) was a collaborative process with multiple stakeholders covering a wide range of interests. The IRWMP identified five immediate term water resources programs for implementation based on their ability to meet multiple goals and objectives and their readiness to proceed to implementation. These five programs are the Water Quality



Program, Water Supply Program, Ecosystem Preservation and Enhancement Program, Groundwater Monitoring and Management Program and Flood Management Program. six projects in this proposal have been selected based upon meeting implementation requirements, achieving one or more IRWMP goals and objectives, helping to address critical needs, stakeholder consensus and two directly benefit disadvantaged communities. The six projects, along

with the project necessary to administer this grant if awarded, are:

- 1. City of Paso Robles Nacimiento Water Treatment Plant
- 2. Attiyeh Ranch Conservation Easement
- 3. Livestock & Land Program
- 4. Shandon State Water Turnout
- 5. San Miguel Community Services District Critical Water System Improvements (DAC)
- 6. San Simeon Supplemental Water Feasibility Study and Design Project (DAC)
- 7. IRWM Implementation Grant Administration

1.2 PURPOSE AND NEED (FOR OVERALL PROPOSAL)

This section ties the six projects and their objectives with the current (2013) regional conditions that drive the need for this Proposal. Provided is a regional description to frame the projects and how they benefit critical regional needs. Regional maps and figures illustrate the geographic boundaries and water resource features benefiting from the implementation of each project.

1.3 REGIONAL DESCRIPTION AND MAPS

The San Luis Obispo IRWM Region (Region) is coterminous with the jurisdictional boundary of San Luis Obispo County (County). In 2011, the Region was awarded a Proposition 84 Round 1 Implementation Grant with three projects shown in **Figure 1-1**. The projects included in the Technical Justification (Attachment 7 of the Proposal) and herein are of equal importance to the Region and especially to the local jurisdictions responsible for implementation most directly affected by the physical benefits.

Section 1.2 and subsections is focuses on the regional characterization of the Round 2 Proposal's projects and their importance to local jurisdictions and stakeholders in meeting critical needs. As such, the benefits of the projects can be grouped into the categories presented in **Table 1-1**.

Table 1-1. San Luis Obispo Round 2 Implementation Grant Projects and Benefits

			•	Projects		
IRWM Programs	City of Paso Robles Lake Nacimiento Water Treatment Plant	Attiyeh Ranch Conservation Easement	Livestock & Land Program	Shandon State Water Turnout	San Miguel Community Services District Critical Water System Improvements	San Simeon Supplemental Water Feasibility Study and Design Project
Water Quality	%	*	V	%	√	*
Water Supply				~		√
Ecosystem Preservation and Enhancement		√				✔
Groundwater Monitoring and Management	€	✔		₹		₹
Flood Management						

The table clearly indicates that each project benefits the Region, with most being multibeneficial. The projects in this Round 2 Proposal are also shown in **Figure 1-1** to provide geographic context between previously grant funded projects, Proposal projects currently seeking grant funding, and the County subregions. These projects are also shown in **Figure 1-3** and **Figure 1-3** along with the represented benefit areas of each.

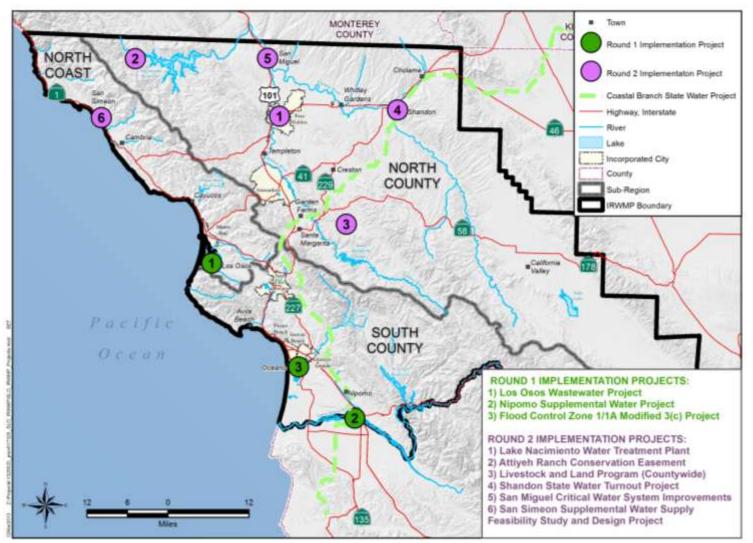


Figure 1-1. San Luis Obispo County Subregions and IRWM Implementation Projects

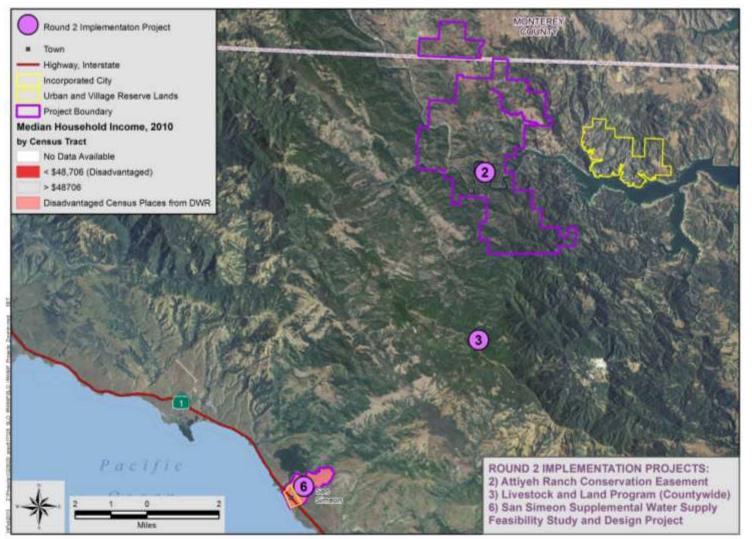


Figure 1-2. North Coast Subregion and Round 2 IRWM Implementation Projects

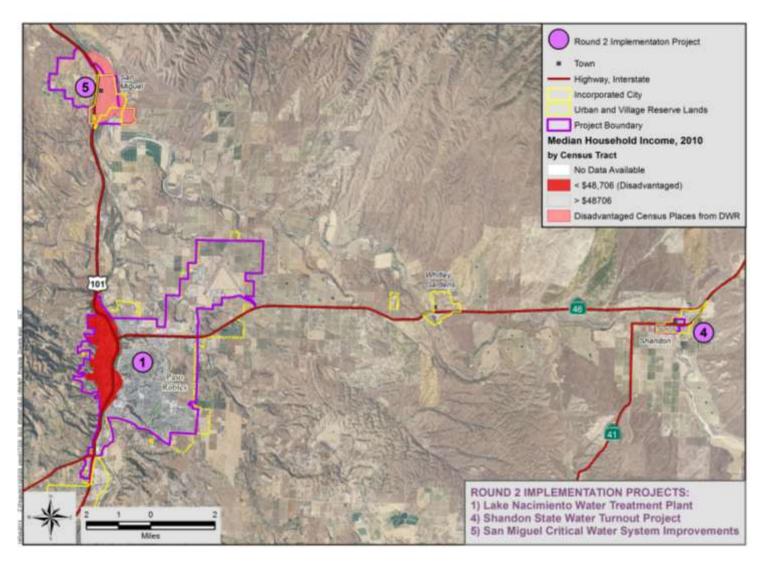


Figure 1-3. North County Subregion and Round 2 IRWM Implementation Projects

1.4 REGIONAL INFRASTRUCTURE

The Region has six regional water supply projects currently in operation that supply water to residents and businesses to various cities, agencies, and unincorporated areas. The Region's major water supply infrastructure (see **Figure 1-4**) is summarized below:

- Lopez Dam and Reservoir, which provides drinking water to the cities of Arroyo Grande, Pismo Beach, Grover Beach, the Oceano Community Services District, and San Luis Obispo County Service Area No. 12 (Avila Beach); downstream releases to the South County Subregion via Arroyo Grande Creek; and recreation activities at the lake.
- Salinas Dam and Reservoir, which provides water to the City of San Luis Obispo; downstream releases to the North County Subregion via the Salinas River; and recreation activities at the lake.
- State Water Project, which provides water supplies to the entities listed in Table 1-2.
- Nacimiento Water Project, which provides water supplies to some lakeside property owners and delivers raw water supplies to the cities of Paso Robles, Atascadero (via the Atascadero Mutual Water Company), San Luis Obispo, the Templeton Community Services District and County Service Area No. 10A (Cayucos; via exchange with City of San Luis Obispo allocation of Whale Rock Reservoir).
- Whale Rock Reservoir, which provides water supplies to joint owners: City of San Luis Obispo, Cal Poly University, and California Men's Colony; as well as to additional downstream users: Cayucos, Paso Robles Beach Water Association, Morro Rock Mutual Water Company, County Service Area 10A, and several landowners.
- Chorro Reservoir, which provides water storage, treatment and distribution to California Men's Colony, Camp San Luis Obispo, County Operations Center/ Office of Education, and Cuesta Community College.

Table 1-2. State Water Project Sub-Contractors and Volumes¹

Sub-Contractor	Water Service Amount (ac-ft)	Drought Buffer (ac-ft)	Total Reserved (ac-ft)		
Chorro Valley Turnout	About \$	1,100 per ac-1	ft		
City of Morro Bay	1,313	2,290	3,603		
CA Men's Colony	400	400	800		
County OP Center	425	425	850		
Cuesta College	200	200	400		
Lopez Turnout	About \$1,000 per ac-ft				
City of Pismo Beach	1,240	1,240	2,480		
Oceano CSD	750	0	750		
San Miguelito MWC	275	275	550		
Avila Beach CSD	100	0	100		
Avila Valley MWC	20	60	80		
San Luis Coastal USD	7	7	14		
Shandon Turnout	To be constructed (pending funding)				
Shandon	100	0	100		
Total	4,830	4,897	9,727		

Reference: San Luis Obispo County Website

http://www.slocountywater.org/site/Major%20Projects/State%20Water%20Project/

¹ San Luis Obispo County Water Resources – Division of Public Works. "SLOCountyWater.org." 2013.

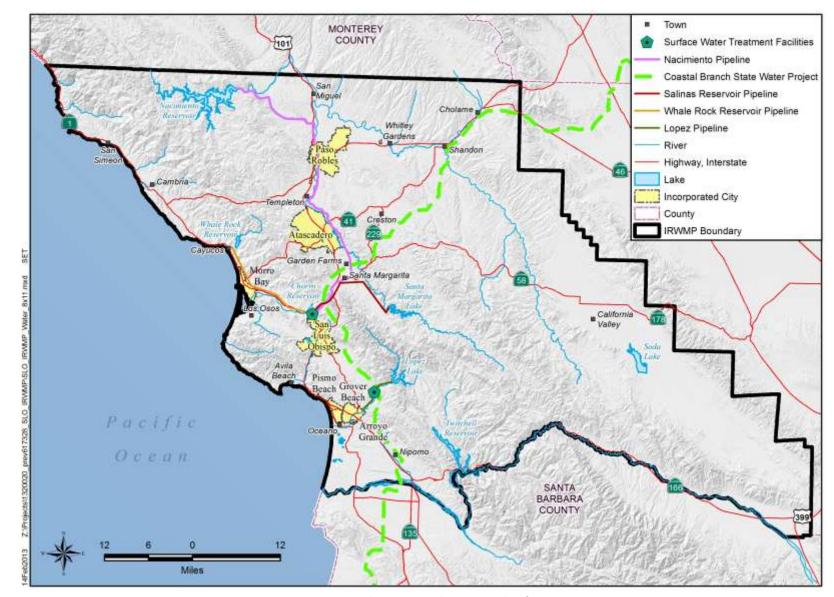


Figure 1-4. San Luis Obispo Regional Water Supply Infrastructure

Table 1-3 summarizes the overall quantity of water resources from all sources for the San Luis Obispo Region by Sub-Region.²

Table 1-3. Average Annual Water Resource Supplies in San Luis Obispo Region

Quantity of Water Resources (ac-ft)								
Sub-Region Surface Groundwater Reclaimed Imported								
North Coast	4,680	13,706	275	1,313	645			
South County	12,781	214,000	135	2,392	0			
North County	6,476	273,700	0	100	0			

Reference: San Luis Obispo County Master Water Report Volume II, May 2012

The following three projects included in this grant proposal utilize or benefit regional water infrastructure:

- 1. City of Paso Robles Lake Nacimiento Water Treatment Plant
- 2. Attiyeh Ranch Conservation Easement
- 3. Shandon State Water Turn-out

1.5 WATER QUANTITY

Water quantity in this case means the volume of water available as stored groundwater in the region. Groundwater is a major water resource element in the region and is recognized as requiring protection and immediate measures to halt the connued decline in elevations.

The discussion of groundwater in the region is broken down into a regional assessment to speak to the larger water resource picture, and then a narrower assessment of how those portions of the San Luis Obispo Region are influenced and benefited by the Proposal's projects.

1.5.1 Regional Discussion

The quantity of water resources within the Region include surface waters, groundwater, reclaimed water, imported water, and desalted water and are described in the Master Water Plans, Urban Water Management Plans, Land Use Planning documents, and other Resource Management Reports developed by agencies, organizations and stakeholders within the region, the California Department of Water Resources (DWR), and the Central Coast Regional Water Quality Control Board (RWQCB), as listed throughout. Suffice it to say, the Region's water resources management is complex and affects a broad range of stakeholders – both locally and statewide. The communities within the Region obtain almost 80 percent of their water from groundwater supplies and about 20 percent from reservoirs.

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 $^{^2}$ San Luis Obispo County. "Master Water Report – Volume 2 of 3." 2012.

Groundwater levels in the Region's groundwater basins are generally highest during the wet season, steadily decline from these levels during the dry season, and recover again to higher levels during the next wet season. Constraints on water availability in the basins include both physical limitations and water quality issues. Shallow alluvial deposits for these basins are typically more susceptible to drought impacts than deeper formation aquifers, since they have less groundwater in storage. Significant lowering of basin groundwater levels at or below sea level near the coast can lead to seawater intrusion and degradation of water quality in both shallow and deep aquifer zones. For the upper basin, water level and well capacity declines during extended drought periods will limit water availability, while in lower valley areas, sea water intrusion and petroleum hydrocarbon contamination may become primary constraints.

1.5.2 Proposal Areas.

The Paso Robles Groundwater Basin is the primary shared water source for municipal, rural residential users, and the extensive agricultural lands in the North County Subregion of San Luis Obispo County. Many well owners, including the City of Paso Robles, have suffered a significant reduction in well capacity or had their wells go dry. Monitoring wells in the Paso Robles Groundwater Basin near the City of Paso Robles show continuous declining elevations indicating insufficient groundwater recharge to sustain current annual average extraction from both urban and agricultural pumping. In addition, potential and existing groundwater recharge areas will be lost if new growth occurs without the incorporation, identification, and conservation of valuable recharge lands. The result is a significant loss in groundwater storage already evidenced by the large decline in groundwater elevation difference contours in **Figure 1-5**

The following three projects included in this Proposal address water quantity needs in the Paso Basin:

- 1. City of Paso Robles Lake Nacimiento Water Treatment Plant
- 2. Attiyeh Ranch Conservation Easement
- 3. Shandon State Water Turnout

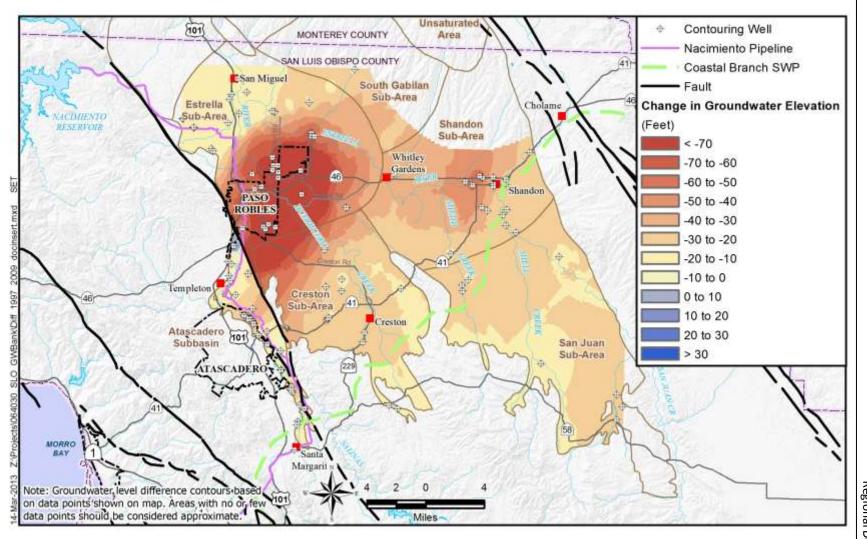
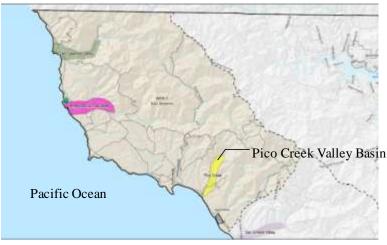


Figure 1-5. Change in Paso Robles Groundwater Elevations (1997 - 2009)

In contrast to the Paso Basin, the smaller Pico Creek Valley groundwater basin (see **Figure 1-6**) underlies and is used solely for water supplies to the small disadvantaged coastal community of San Simeon, with a small amount allocated for Hearst Ranch. San Simeon is 100 percent dependent on the local watershed to capture rainfall for groundwater basin recharge and to sustain continuous flows in Pico Creek to feed two municipal underflow wells near the creeks outlet to the Pacific Ocean. During dry months and extended drought conditions, San Simeon lacks sufficient water to meet peak water demands, leaving the community without water for outdoor irrigation and adequate fire flow protection. The following project in this Proposal addresses water quantity needs in the Pico Creek Valley watershed:

1. San Simeon Supplemental Water Supply Feasibility Study and Design Project



Source: 2012 Master Water Report

Figure 1-6. Pico Creek Valley groundwater Basin²

1.6 WATER QUALITY

The waters in the San Luis Obispo Region have the good fortune of being exposed to fewer pollutants than many of the State's urban areas. The health of the Region's water is critical to sustaining local communities and numerous ecosystems.

Despite many "first-class" natural resources, the Region has some notable water quality challenges. Many areas in the Region face water quality degradation due to declining groundwater levels, while other areas are exposed to groundwater pollutants from septic systems, compliance issues faced by specific wastewater systems, seawater intrusion, and other challenges.

Table 1-4 summarizes the Region's water quality constituents of concern. A more detailed summary of the Region's water quality issues and challenges and water quality constituents of concern are described in the 2007 IRWMP.

The following four projects included in this grant proposal provide water quality benefits to the region:

- 1. Attiyeh Ranch Conservation Easement
- 2. Livestock & Land Program
- 3. San Miguel Community Services District Critical Water System Improvements
- 4. San Simeon Supplemental Water Supply Feasibility Study and Design Project

Table 1-4. Water Quality Constituents of Concern in San Luis Obispo Region Water Resource Supplies

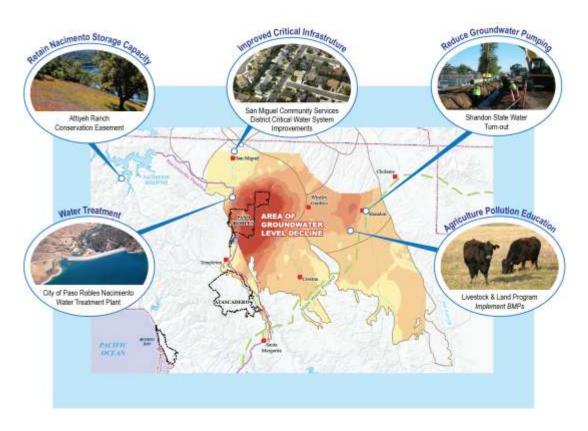
rable 1-4. Water	Quality of Water Resources (ac-ft)							
Sub-Region	Surface Water	Groundwater	Reclaimed	Imported	Desalted			
North Coast	Number of 303(d) listed water bodies: Pathogens - 13 Nutrients - 8 Sediments - 3 Salinity - 1 Temperature - 1	 TDS Manganese Sea Water Intrusion MtBe Petroleum Hydrocarbon Nitrates 	Tertiary recycled water is used at the Dairy Creek Golf Course.	State Water Project provides supplementary water throughout the Sub-Region.	Desalination is used as a backup supply source.			
South County	Number of 303(d) listed water bodies: Pathogens - 15 Nutrients - 10 Salinity - 6 Toxicity - 5 Pesticides - 3 Sediments - 2 Metals/Metalloids - 1 Other Organics - 1 Misc. Pollutants - 1	 TDS Nitrates Salinity Hardness PCE Chlorides Sea Water Intrusion Sulfates Iron Manganese Selenium 	Tertiary recycled water serves the City of San Luis Obispo golf courses, schools, and parks, as well as for environmental habitat discharge.	State Water Project provides supplementary water throughout the Sub-Region.	Desalination is being consider ed to augmen t future water supply.			
North County	Number of 303(d) listed water bodies: • Metals/Metalloids - 5 • Pathogens - 3 • Nutrients - 3 • Salinity - 3 • Misc. Pollutants - 2	TDSMBASChloridesNitratesArsenicBariumBoron		State Water Project provides supplementary water throughout the Sub-Region.				

Source: San Luis Obispo County Master Water Report, 303(d) List³

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 $^{^3}$ California Environmental Protection Agency — State water Resources Control Board. "2010 Integrated Report (Clean Water Act Section 303(d) List/ 305(b) Report — Statewide." 2010.



Source: San Luis Obispo County Master Water Report

1.7 WATER RELIABILITY

Since the IRWMP was developed in 2007, efforts to improve the reliability and quality of the Region's water supply have been initiated or completed. The IRWMP identified an opportunity for banking water in the Paso Basin, the largest basin in the County. The Paso Basin has two regional water supply infrastructures pass adjacent to it: the Coastal Branch of the State Water Project (SWP) and the Nacimiento Water Project. This physical proximity along with the Region's unused allocation of SWP and Nacimiento water, led local water leaders to want to explore the feasibility of recharging the Paso Basin through use of treated surface water in-lieu of (or to offset) groundwater pumping.

San Simeon, as described before, depends solely on Pico Creek Valley groundwater basin and lacks sufficient water supply to adequately meet demand during certain periods. The most feasible solution to this critical water reliability issue is unknown. This Proposal seeks to identify and design the project needed to improve reliability.

The following four projects included in this Proposal provide water reliability benefits to the Region by developing new supplies or optimizing and improving the use of existing supplies:

- 1. City of Paso Robles Lake Nacimiento Water Treatment Plant
- 2. Shandon State Water Turnout
- 3. San Miguel Community Services District Critical Water System Improvements
- 4. San Simeon Supplemental Water Supply Feasibility Study and Design Project

1.8 ENVIRONMENTAL RESOURCES

The Region places great value on the environmental resources, both for their cultural and social importance. The Region has focused many of its land use policies on sustainability and "living within our means." Growth management ordinances have long been established to provide a balance between economic development and preservation of agricultural and natural resources.

In addition to the Region's natural resources and environmentally-minded cultural values, the Region's culture is also strong in community values. Without the urban sprawl common in many regions of the State, the Region's character and social values are apparent in the individual communities as well as in the vast, open space. Geographical separation between cities and towns within the Region helps support their unique identities. The North County, North Coast, and South County subregions are well known for distinct identities just as the cities and towns are known for their unique identities. The mixture of agricultural, environmental, educational, professional, crafts and trades, and other interests truly reflects a region that is culturally and socially rich and diverse, but common in its pursuit of a good quality of life.

The following two projects included in this Proposal protect or enhance the environmental resources and protect this regional character in the Region:

- 1. Attiyeh Ranch Conservation Easement
- 2. Livestock & Land Program

1.9 REGION DEMOGRAPHICS

San Luis Obispo County's population reached 269,637 in 2010, which represents a 2% population increase since the 2007 IRWMP. A summary of the common demographic metrics is provided in **Table 1-5** for the seven cities of San Luis Obispo County (not provided for CSDs or unincorporated areas)⁴. Although personal income and wealth have been rising in San Luis Obispo County, poverty and lower income areas still exist. **Figure 1-7** shows the region's disadvantaged incorporated and unincorporated communities whose median household income is less than 80% of the State-defined median household income (\$48,706). Additional demographic information can be found in the following table.

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⁴ United States Census Bureau. "American Community Survey." 2006-2010.

The following two projects included in this grant proposal provide critical water supply and water quality benefits for Disadvantaged Communities in the region:

- 1. San Miguel Community Services District Critical Water System Improvements
- 2. San Simeon Supplemental Water Supply Feasibility Study and Design Project

Table 1-5. City Demographics of San Luis Obispo County

	Demographics for Incorporated Cities in the Region								
City	Total Population	Total Households			Median Household Income				
Arroyo Grande	16,990	7,051	2.37	7.2	\$58,725				
Atascadero	27,981	10,453	2.43	7.6	\$65,479				
Grover Beach	13,137	5,206	2.52	6	\$49,010				
Morro Bay	10,255	4,646	1.98	3.7	\$53,585				
Paso Robles	28,794	10,766	2.67	7.6	\$57,459				
Pismo Beach	7,802	3,761	2.05	5.6	\$63,702				
San Luis Obispo	44,959	19,734	2.21	8.5	\$40,812				

Reference: US Census Bureau, 2010 ACS 5-year estimates

1.10 ROUND 2 PROJECT SYNERGIES IN OVERCOMING PROGRAM CHALLENGES

Table 1-6 provides the essential understanding of how each of the Proposal's projects benefits the region and creates synergies by meeting one or more of the Region's challenges discussed above. This table provides an important understanding of why the high priority projects were selected to help with the Region's successful implementation of the IRWMP. A broad, overarching discussion of the Project Synergies is presented in Section 1.4.

Attachment 7describes each project's technical justification, relationship with the IRWMP program objectives, and quantified physical benefits in much greater detail.

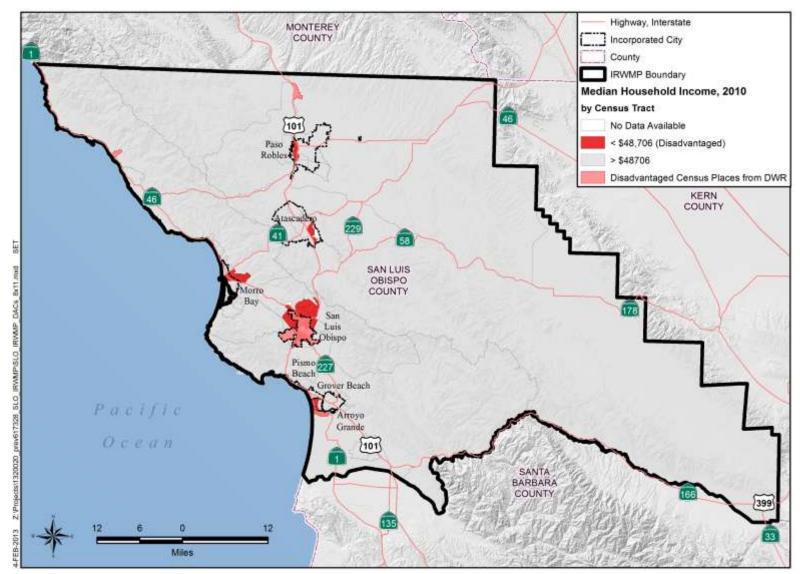


Figure 1-7. Disadvantaged Communities of San Luis Obispo County

Project Name	Brief Project		San Luis C	bispo Water Resource Ch	allenges	
	Description	Groundwater	Watershed	Drinking Water from	Water Resources	DAC Drinking
		Management	Management	Surface Water	Management	Water
City of Paso Robles	Construction of a	Provides much needed		Makes use of the	Provides sufficient	Portions of Paso
Lake Nacimiento Water	2.4 mgd surface	in-lieu recharge of the		region's Nacimiento	redundancy in the Paso	Robles are
Treatment Plant	water treatment	Paso Basin near the		apportionment of	Robles' water system to	considered to be
	plant.	most impacted areas		surface water.	optimize conjunctive	DAC's.
		of the basin.			use operations	
Attiyeh Ranch	Acquisition of a	Protects the overlying	Prevents urbanization		Protection of down-	
Conservation Easement	conservation	recharge areas of local	thereby protecting the		gradient surface and	
	easement to	groundwater basins	local watersheds from		groundwater supplies	
	protect land in	and reduces recharge	soil erosion and		for use by urban	
	perpetuity.	of poor quality water.	contamination.		communities	
Livestock & Land	County-wide	Reduces the potential	County-wide program			
Program - Implement	program for	for contamination of	to protect local and			
BMPs	managing	groundwater from	regional			
	contamination	manure, urine and	contamination and soil			
	from livestock	sediments from	disturbance from			
	facilities.	livestock.	livestock activities.			
Shandon State Water	A new turnout on	Provides in-lieu		Makes use of the	Provides redundancy in	Surface water
Turn-out	the State Water	recharge		region's State Water	the Community of	delivered to the
	Project pipeline to	opportunities by		Project allocation of	Shandon's potable	Paso basin in-lieu
	receive already	providing water to		surface water.	water system and to	of groundwater
	allocated 100 AFY	both agriculture and			agriculture for	use provides
	of State Water	urban water systems,			optimization of	benefits to small
	Project.	reducing use of basin.			conjunctive use	DACs where
					practices.	groundwater is the
						only affordable
						water supply.

Table 1-6. Important Facts and Common Challenges Addressed by Round 2 Projects, Continued

Project Name	Brief Project		San Lu	uis Obispo Region's Challe	nges	
	Description	Groundwater	Watershed	Drinking Water from	Water Resources	DAC Drinking
		Management	Management	Surface Water	Management	Water
San Miguel Community Services District Critical Water System Improvements	Upgrading of a small community water system.					Upgrades to DAC groundwater system within the Paso Basin where water quality degradation is occurring.
San Simeon Supplemental Water Supply Feasibility Study and Design Project	A study to support the design of a supplemental water supply project.	San Simeon overlies a small groundwater basin where studies of the groundwater behavior can optimize safe and sustainable groundwater yields.	Watershed studies can look at preserving groundwater recharge areas, improving surface water quality and capturing stormwater runoff for recharge.	San Simeon has a surface water right that can be balanced with groundwater rights to meet their water supply requirements.	Studies can identify through feasibility analysis which alternative supplies and programs will optimize the available water resources, including recycled wastewater.	Studies of supplemental water supplies for a DAC currently subjected to poor water system reliability, insufficient annual volumes and salinity impacts from the ocean.

Chapter 2. PROJECT LIST

Table 2-1 and **Table 2-2** provide a brief summary of the proposal's six projects, their funding requests, current status in terms of percent complete, and the implementing agencies. Following the project summary tables is a detailed description along with project pictures, if applicable.

Of the six projects, only two have made substantial progress in completed work, Shandon State Water Turn-out and City of Paso Robles Nacimiento Water Treatment Plant with an estimated completion in design phase of 70% and 60% complete, respectively. The Round 2 Proposition 84 Grant Proposal project cost recommendations are shown in **Table 2-1**, totaling \$22.5 million with \$7.569 million of requested grant funding.

Table 2-1. Round 2 Implementation Grant Funding Distribution Recommendation

San Luis Obispo Region	Project Title	Grant Funding	Other Funding	Cost Share: Other State Fund Source	Total Project Cost
North County	City of Paso Robles Lake Nacimiento Water Treatment Plant	\$3,150,000	\$8,174,306	\$0	\$11,324,306
North County	Attiyeh Ranch Conservation Easement Project	\$2,100,000	\$1,997,629	\$4,374,761	\$8,472,390
Regional	Livestock & Land Program - Implement BMPs	\$274,984	\$42,800	\$0	\$317,784
North County	Shandon State Water Turnout	\$337,000	\$133,000	\$45,000	\$515,000
North County	San Miguel Community Services District Water System Improvements	\$950,000	\$0	\$0	\$950,000
North Coast	San Simeon Supplemental Water Feasibility Study and Design Project	\$700,000	\$0	\$0	\$700,000
Sub-Total		\$7,511,984	\$10,347,735	\$4,419,761	\$22,279,480
Regional	IRWM Implementation Grant Administration	\$57,016	\$161,634	\$0	\$218,650
Total		\$7,569,000	\$10,509,369	\$4,419,761	\$22,498,130

Table 2-2. Project Abstracts, Percent Complete, Implementing Agencies

Project Name	Project Abstracts	Percent Complete ¹	Implementing Agency(s)
City of Paso Robles Nacimiento Water Treatment Plant	A 2.4 MGD capacity potable water treatment plant is currently under design, which will utilize existing allocation of 4,000 AFY from Nacimiento Reservoir. The City's capital program currently has construction scheduled for FY 2015/2016. Based on the most recent financial projections, securing an additional \$3.15 million in Prop 84 grant funds would allow the timing of the initial plant phase to be accelerated by one year.	Weighted average, based on design costs is 60%	City of Paso Robles
Attiyeh Ranch Conservation Easement	The purpose of the Attiyeh Ranch Conservation Easement is to preserve the Attiyeh Ranch and prevent the conversion of current rangeland, grazing land and grassland to a more intensive cattle grazing regime, vineyard or parcel-specific development of ranchettes and hobby farms; to protect the long-term sustainability of low intensity livestock grazing and the benefits that occur from livestock grazing; and to ensure continued wildlife, water quality, watershed and open-space benefits from livestock grazing on the 8,305 acre ranch. It is further the purpose of the conservation easement to ensure the Attiyeh Ranch will be retained forever in its agricultural and natural condition and to prevent uses within the ranch that will significantly impair or interfere with the open space, agricultural, and natural habitat values of the ranch. The requested \$2.1 million conservation easement and conservancy related activities will confine the use of the ranch to such activities, including, without limitation, those involving livestock grazing, habitat protection, education and other compatible uses.	Will begin with grant award	The Land Conservancy of San Luis Obispo

Table 2-2. Project Abstracts, Percent Complete, Implementing Agencies, Continued

Project Name	Project Abstracts	Percent Complete ¹	Implementing Agency(s)
Livestock & Land Program	The Livestock and Land Program will address natural resource concerns faced by livestock owners by providing education, technical assistance and cost share for implementation of best management practices (BMPs). Water quality improvements will be achieved by giving livestock owners the tools to complete water quality site assessments and to implement BMPs near listed waterways. The behavioral and management practice changes achieved by this program will provide immediate and lasting water quality and watershed improvements by reducing the off-site mobilization of manure, urine and sediments from livestock facilities. The program will make significant progress toward watershed goals listed in Total Maximum Daily Loads (TMDLs) and watershed plans.	Will begin with grant award	The Coastal San Luis and Upper Salinas Las Tablas Resource Conservation Districts
Shandon State Water Turn-out	San Luis Obispo County (County) is proposing to construct a water turnout facility that will connect the water distribution system for County Service Area No. 16 (CSA 16) in Shandon, CA to the State Water Project pipeline. The Shandon State Water Turnout Project will allow CSA 16 to access and distribute its State Water allocation of 100 acre-feet per year to the community of Shandon, providing increased water supply reliability and relief to the stressed Paso Robles groundwater basin.	70% Design EIR certified and adopted by County Board of Supervisors	San Luis Obispo County- County Service Area 16

Chapter 2. Project List

Services District (DAC)

grant award

San Miguel Community Services District Critical Water System Improvements	This grant application is seeking funding for six of the highest priority, critical water supply projects as listed below. The San Miguel Community Services District (SMCSD) needs to implement all six of these identified projects in the immediate future, or they will be faced with continued deterioration of an already deficient water system, and may not be able to support even limited beneficial growth with the identified deficiencies that face the SMCSD's water system. The majority of the District's residents are low-income households, meeting the criteria as a Disadvantaged Community (DAC). These projects help meet the critical water supply and water quality needs of the DAC.	30% Design EIR certified	San Miguel Community Services District (DAC)
San Simeon Supplemental Water	This project is submitted under the Expanded Project Eligibility	Will begin with	San Simeon Community

allowance based on the DAC status of the San Simeon Community

Services District (SSCSD) service area and the critical water supply, water quality, and water system improvements needed to provide safe, reliable drinking water and fire protection. SSCSD is pursuing a supplemental water supply project to increase safe sustainable water supplies from the small Pico Creek Valley groundwater basin which is dependent on the local watershed to recharge and protect the basin

each year, especially during extended drought conditions.

Notes:

Feasibility Study and Design Project

Table 2-2. Project Abstracts, Percent Complete, Implementing Agencies, Continued

^{1.} Percent complete forecasted as October 1, 2013

2.1.2 Full Project Descriptions, Pictures and Project Site Maps

Project 1. Lake Nacimiento Water Treatment Plant

The City of Paso Robles currently relies on water from two sources: Salinas River underflow wells and groundwater from the deeper formation of the Paso Robles Groundwater Basin (Paso Basin). Groundwater use in the Paso Basin is at, or exceeds the basin perennial yield. The basin is the primary shared water source for municipal, rural residential users, and the extensive agriculture land in northern San Luis Obispo County. San Luis Obispo County Board of Supervisors has designated the basin as a Level of Severity III, indicating the demand for water will equal or exceed its supply before supplemental supplies can be developed. Significant groundwater level declines in City wells and in extensive areas of the Paso Basin have been occurring since the 1990's and have been documented in the Paso Robles Groundwater Basin Management Plan, March 2011⁵. The basin management plan was developed with an Assembly Bill (AB) 303 grant.

As a result of falling groundwater levels, the City of Paso Robles has regularly experienced seasonal water supply shortfalls since the mid-2000s. Mandatory summer outdoor water use restrictions have been in place in Paso Robles since 2009. The City of Paso Robles identified the need for supplemental water supplies to meet current and future needs in its 2000, 2005, and 2010 Urban Water Management Plans⁶ (UWMP; on file with DWR). The City of Paso Robles's existing 4,000 AFY allocation of Lake Nacimiento water was identified in the Paso Robles UWMPs as the most feasible and cost-effective supply alternative. In 2004, the City of Paso Robles entered into an agreement with the San Luis Obispo County Flood Control and Water Conservation District (District), San Luis Obispo County (County) - County Service Area No. 10A, Templeton CSD, Atascadero Mutual Water Company, and the City of San Luis Obispo, to construct the Nacimiento Water Project to deliver untreated lake water to each community via regional infrastructure. The Nacimiento Water Project began delivering water in 2011. The City of Paso Robles has not yet constructed the potable water treatment plant necessary to begin taking its water allocation and so, the city's allocation remains unused. The water rate increases needed to fund construction of the plant and pay for its portion of the Nacimiento Water Project were approved by Paso Robles in 2010, and the first phase of the plant is now under design with construction scheduled to start in late 2013 (pending grant award).

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⁵ City of El Paso de Robles and County of San Luis Obispo. "Paso Robles Groundwater Basin management Plan." 2011.

⁶ City of Paso Robles. "2010 Urban Water Management Plan." 2010.

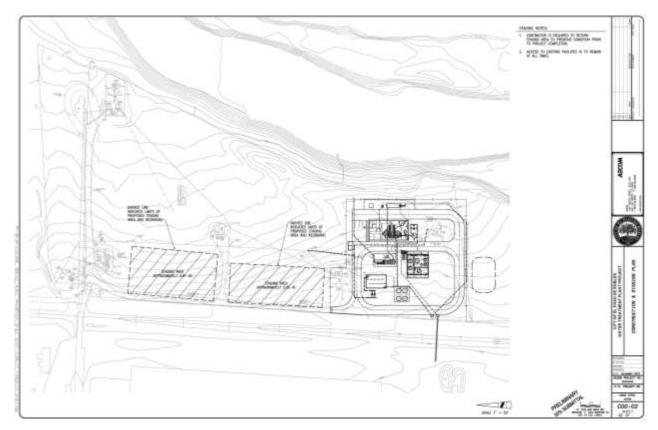


Figure 2-2. Project Site Map - Lake Nacimiento Water Treatment Plant

Project 2. Attiveh Ranch Conservation Easement

The purpose of the Attiyeh Ranch Conservation Easement is to preserve the Attiyeh Ranch and prevent the conversion of current low intensity rangeland, grazing land and grassland to a more intensive cattle grazing regime, vineyard or parcel-specific development of ranchettes and hobby farms; to protect the long-term sustainability of low intensity livestock grazing and the benefits that occur from livestock grazing; and to ensure continued wildlife, water quality, watershed and open-space benefits of the 8,305 acre ranch. It is further the purpose of the conservation easement to ensure the Attiyeh Ranch will be retained forever in its agricultural and natural condition and to prevent uses within the ranch that will significantly impair or interfere with the open space, agricultural, and natural habitat values of the ranch. The conservation easement will confine the use of the ranch to such activities, including, without limitation, those involving low intensity livestock grazing, habitat protection, docent-led public hikes, education and other compatible uses.

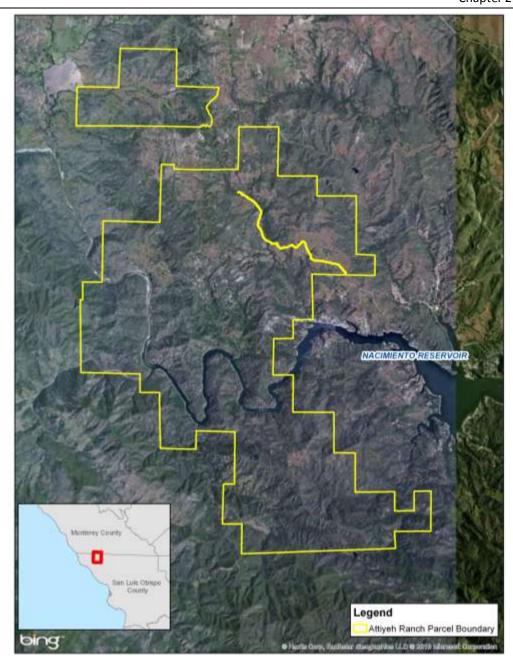


Figure 2-3. Project Site Map - Attiyeh Ranch Conservation Easement

Project 3. Livestock and Land

Agriculture is a driving economic force in San Luis Obispo County. The *Census of Agriculture*, *Vol.* 1⁷ (2007) estimates that San Luis Obispo County has 940 horse farms with 8,816 horses and 726 ranches with 56,830 cattle. These numbers have likely grown, with the 2011 Crop Report⁸

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⁷ United States Department of Agriculture. 'United States Summary and State Data – Volume 1 Geographic Area Series Part 51." 2009.

Series Part 51." 2009.

8 San Luis Obispo County Department of Agriculture. "Protecting Our Resources – 2011 Annual Report." 2011.

put out by the County Agricultural Commissioner's office estimating 81,000 cattle. More recent numbers for horses are not available.

Twenty one (21) surface waterbodies in the project region are listed on the 303d listing³ for target pollutants related to livestock operations. Achieving water quality goals and protecting beneficial uses of these water supply resources is critical to the Region.

The Coastal San Luis and Upper Salinas Las Tablas Resource Conservation Districts (Conservation Districts) are implementing the Livestock and Land Program to address natural resource concerns faced by livestock owners by providing education, technical assistance and cost share for implementation of Best Management Practices (BMPs). Water quality improvements will be achieved by giving livestock owners the tools to complete water quality site assessments and to implement BMPs near listed waterways. The behavioral and management practice changes achieved by this program will provide immediate and lasting water quality and watershed improvements by reducing the off-site mobilization of manure, urine and sediments from livestock facilities. The program will make significant progress toward watershed goals listed in Total Maximum Daily Loads (TMDLs) and watershed plans.



Figure 2-4. Project Site Map - Livestock and Land

Figure 2-4 above shows the boundaries of both Conservation Districts. The pilot projects associated with this program could occur at any known impacted waterway within these boundaries, pending site assessments and location selection.





Figure 2-5. Horse Ranch, unincorporated area outside of City of San Luis Obispo

Figure 2-6. Cattle grazing in Nacimiento Watershed, San Luis Obispo County.

This project also furthers a comprehensive watershed approach by bringing together a wide variety of people working on water quality issues throughout the Region including landowners, private business owners and interested citizens. In implementation, project design and water quality site planning activities are highly collaborative. Our technical experts including National Resource Conservation Service (NRCS), U.C. Cooperative Extension (UCCE), County, Conservation Districts and local specialists assist landowners to conquer site-specific erosion and manure management challenges. The Conservation Districts prioritize activities identified in local and regional watershed management plans (i.e. TMDL and 303(d) listings) thus increasing coordination among all stakeholders within each targeted watershed. Because the program will operate on a Region-wide basis, solutions will be promoted and prioritized for site implementation that provide greater benefit to watersheds.



Figure 2-9. Hands on training afforded by the community-based approach.

Project 4. Shandon State Water Turnout

Shandon currently relies on groundwater from the overdrafted Paso Basin as its sole water supply source. From 2005 to 2012, County Service Area No. 16's (CSA 16; Shandon) average yearly water demand, comprised entirely of pumped groundwater, was 156 acre-feet.

The County, on behalf of CSA 16, is proposing to construct a water turnout facility that will connect the water distribution system for CSA 16 in Shandon to the existing Coastal Branch, Phase II State Water Project pipeline (48-inch, steel). The connection will be constructed near the intersection of San Juan Road and Toby Way in Shandon. The Shandon State Water Turnout Project will allow CSA 16 to access and distribute its existing State Water allocation of 100 AFY that was obtained in 1992.

This new water supply source will improve regional water supply reliability and security by reducing pumping from the Paso Basin, which has reached its yield and whose water levels have been rapidly declining. It will also diversify Shandon's water portfolio so that it has a source other than groundwater, which is susceptible to drought impacts, declining water levels and well contamination. Thus diversifying its supply so that, when available, State Water can be used in lieu of the groundwater basin, and vice versa – this ability to conjunctively use supplies will allow for periods of groundwater basin recovery, while not creating a dependence on State Water.

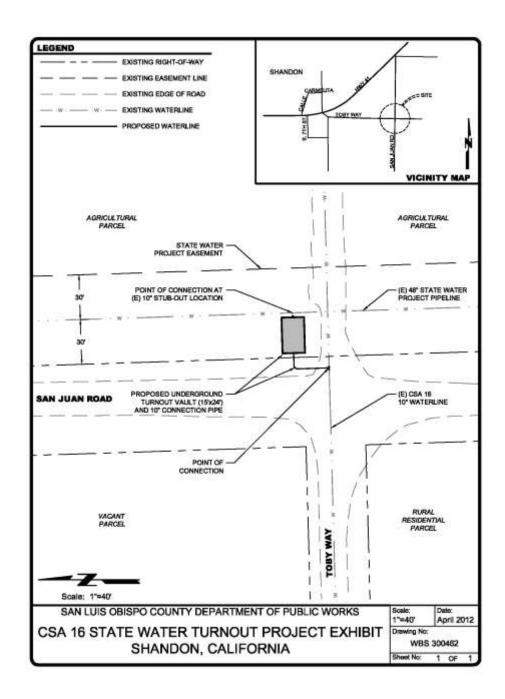


Figure 2-10. Project Site Map - Shandon State Water Turnout

Project 5. San Miguel Critical Water System Improvements

This Proposal is seeking funding for six of San Miguel's highest priority, critical water supply/quality projects as listed below. The San Miguel Community Services District (SMCSD) needs to implement all six of these identified projects in the immediate future, or they will be faced with continued deterioration of an already deficient water system, and may not be able to support

even limited beneficial growth due to the identified deficiencies that face the SMCSD's water system. The majority of the SMCSD's residents are low-income households, meeting the criteria as a Disadvantaged Community (DAC) by having incomes of \$42,176, well below the State's DAC threshold of \$48,706. These projects help meet the critical water supply and water quality needs of the DAC:

- Well 3 Rehabilitation Well 3 is over 40 years old and requires upgrades in the well motor housing, disinfection system, electrical wiring, backup power generation and the protective structural building.
- Emergency Backup Power Equip Well 3 and Well 4 with power generators in the event of power failures to maintain a minimum supply of water during widespread power outages.
- New Fire Hydrants and Wharf Head Replacements Thirteen (13) new fire hydrants to replace inadequate and aging hydrants.
- New Water Well Siting Study Respond to the urgent need of replacing the San Lawrence Terrace Well, taken out of service because of high arsenic concentrations, and providing water supply redundancy in the event of an emergency shutdown of any three existing wells.
- New Water Storage Tank Construct the San Lawrence Terrace Water Storage Tank with 0.25 million gallons for capacity and water quality improvements
- 12th and K Street Water Main Upgrades Replace old and undersized piping at 12th Street and K Street.

Project 6. San Simeon Supplemental Water Feasibility Study and Design Project

San Simeon Community Services District (SSCSD) is pursuing a supplemental water supply project to increase water supply resources to the small disadvantaged community (DAC) of San Simeon. Underlying San Simeon is a small groundwater basin (Pico Creek Valley Groundwater Basin, 62.5 acres) bounded by the Pacific Ocean to the west and extends inland about 7,000 feet under the stream channel and floodplain of Pico Creek. The clean water aquifer is dependent on the local watershed to recharge and protect the basin each year, especially during extended drought conditions.

As per Exhibit E of the Round 2 Proposal Solicitation Package Guidelines, DACs are given special preference in allowing the study and planning of critical water supply or water quality needs. This project is submitted under the such expanded project eligibility allowance based on the DAC status of the SSCSD service area and the critical water supply, water quality, and water system improvements needed to provide safe, reliable drinking water and fire protection.

This DAC planning project does not include construction activities for this grant request. The project seeks to conduct a feasibility study of potential supplemental water supply sources to address critical needs, and a design project to get the community construction-ready when future funding sources become available. Field work to be performed by engineering and environmental consultants is going to be limited to water quality sampling, soil investigations, and setting up monitoring equipment at a well or in Pico Creek.

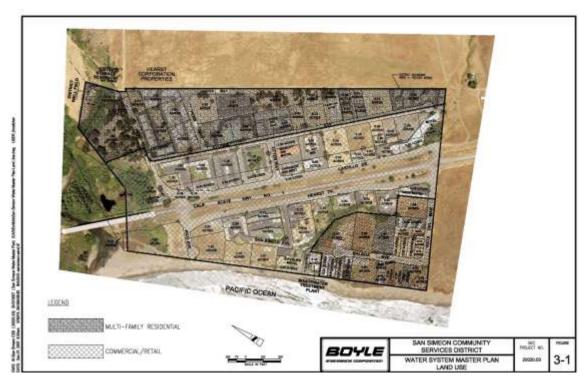


Figure 2-11. Project Site Map - San Simeon Supplemental Water Feasibility Study and Design Project

Chapter 3. Integrated Elements of Projects

This section provides the regional linkages between and among the six projects, recognizing the higher benefit from implementing several projects aimed at a single water resource challenge.

3.1 PROJECT SYNERGIES

With cyclical droughts, declining groundwater levels, degradation of surface and groundwater quality, and the limited availability of surface water supplies, it is important for stakeholders in the San Luis Obispo County IRWM Region (Region) to effectively manage available water resources. Our focus on this orchestrated water resource management allows the Region to better protect the public health and safety, maintain viable ecosystems, improve water resources availability through optimization of supply sources, and improve surface and ground water quality to ensure its usability for generations to come.

To that end, the local Regional Water Management Group and stakeholders developed this Proposal, combining a suite of locally-vetted projects critical to the success of our regional water resource management efforts.

The Region recognized several critical local water resources needs:

- Stabilize the rapidly declining level in Paso Robles Groundwater Basin;
- Protect and enhance vital ecosystem resources; and
- Address critical water supply and quality needs of disadvantaged communities.

The San Luis Obispo County Resource Capacity Study⁹ (November 2010) found that the Paso Robles Groundwater Basin is at or near the perennial yield of about 97,700 acre-feet per year (AFY) – placing the basin at the most severe/ critical planning designation. Parts of the basin have experienced **declining groundwater levels in excess of 70 feet** over a relatively short period of time: 1997-2009, and those levels continue to drop. Five projects in this Proposal help to reduce stress on the basin by bringing in new sources of water, optimizing use of existing entitlements, improving infrastructure related to water supply, and/or protecting water supply sources:

- 1. <u>City of Paso Robles Nacimiento Water Treatment Plan</u> Introduce 2.4 MGD of potable water to the City of Paso Robles users, thereby offsetting groundwater use by utilizing the existing, but previously un-used, 4,000 AFY entitlement to Nacimiento Reservoir water.
- 2. Shandon State Water Turnout Access existing State Water allocation of 100 AFY for the community of Shandon, providing increased water supply reliability and relief to the stressed Paso Basin. Thus diversifying its supply so that, when available, State Water

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⁹ County of San Luis Obispo. "Resource Capacity Study – Water Supply in Paso Robles Groundwater Basin." 2011.

- can be used in lieu of the groundwater basin, and vice versa this ability to conjunctively use supplies will allow for periods of groundwater basin recovery, while not creating a dependence on State Water.
- 3. San Miguel Community Services District Critical Water System Improvements Ensure continued reliability of the minimum quantity and quality of potable water delivered, augment inadequate water supply system pressure to prevent loss of system integrity and to maintain adequate fire protection flows and replace or rehabilitate water supply wells that have exceeded their useful life. Maintaining infrastructure reliability is critical as this community is solely dependent upon the basin for water supply.
- 4. Attiyeh Ranch Conservation Easement Protect 8,305 acres of lakeside property from future development, thereby protecting the land from excessive runoff consistent with development, and sustained groundwater percolation and retention of water in Nacimiento Reservoir to maintain historical beneficial uses.
- 5. <u>Livestock & Land Program</u> Educate the agricultural community on Best Management Practices to reduce their livestock facilities' negative impact on surface water quality, thereby helping to institute behavioral changes that will lead to improved surface water quality for downstream users.

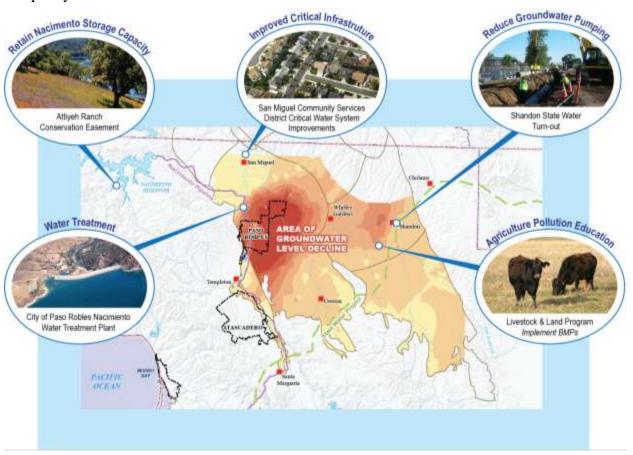


Figure 3-1. Enhancing Water Resource Use: Relieving Stress on the Paso Basin.

Regional stakeholders see the protection and enhancement of vital ecosystems as an elemental component of local resource management. This Proposal includes the Attiyeh Ranch

Conservation Easement, which not only preserves water supply as described earlier, but also protects land with significant benefit to wildlife and the public by preserving its current limited, low intensity ranching practices, open space corridors, and stunning landscapes. The conservation easement will protect 8,305 acres in perpetuity from future development and will serve to "provide opportunities that bond people to the heritage, wonder and bounty of our county's vital lands" via docent-led hikes. It will enhance quality of





life by preserving landscapes that sustain the Region's drinking water, fresh air, and wildlife.

Lastly, this Proposal seeks to help address critical water supply and quality needs in two local disadvantaged communities (DACs): San Simeon and San Miguel. DACs by their very nature of being low income areas have more difficultly funding and making resources available to identify alternatives to meet critical water supply and quality needs and to implement solutions to address those

needs. The community of San Miguel is solely dependent upon groundwater and **deficient** water system infrastructure. The community needs to implement projects included in this Proposal in the immediate future or they face continued deterioration of an already deficient water system and may not be able to support current fire flow needs or even limited beneficial

growth with the identified deficiencies that face the community's water system. Similar to San Miguel, the coastal community of San Simeon is solely dependent upon one source: the Pico Creek Valley Groundwater Basin – a source that faces overuse and seawater intrusion. Unlike San Miguel, although the community recognizes a need to mitigate these issues, this community lacks the resources to conduct necessary studies to identify the best solution. This proposal seeks to address this critical water supply and quality need by conducting a supplemental



water supply feasibility study and design project to increase its safe sustainable water supply. Both projects bring the communities one step closer to revitalizing their well-being.

Grant funding of this Proposal will help the Region to implement projects critical to the success of our regional water resource management efforts.

Chapter 4. IRWM GOALS AND OBJECTIVES 10

This section will provide the following: 1) describe the five San Luis Obispo IRWMP programs, 2) define the IRWMP goals and objectives, 3) provide specific project goals, and 4) align the Proposal's project objectives with the five IRWMP program objectives. The six programs are described below following a brief summary of how each project addresses IRWMP program objectives.

4.1 WATER QUALITY PROGRAM

The waters in the San Luis Obispo Region have the good fortune of being exposed to fewer pollutants than many of the State's urban areas. The health of the Region's water is critical to sustaining local communities and numerous ecosystems.

Despite many "first-class" natural resources, the Region has some notable water quality challenges. Many areas in the Region face water quality degradation due to declining groundwater levels, while other areas are exposed to groundwater pollutants from septic systems, compliance issues faced by specific wastewater systems, seawater intrusion, and other challenges. The Water Quality Program goals and objectives are summarized in **Table 4-1** and a summary of how each project satisfies the objectives is illustrated **Table 4-2**.

4.1.1 Alignment of Individual Project Objectives with Water Quality Objectives

Project 1. Lake Nacimiento Water Treatment Plant

The water quality objectives of the Lake Nacimiento Water Treatment Plan are addressed through the improved water quality of Lake Nacimiento water over the city's current groundwater supply. The project will have a significant positive impact on the Total Dissolved Solids (TDS) and hardness concentrations of wastewater discharges to the Salinas River at the City of Paso Robles Wastewater Treatment Plant. The TDS concentration of Nacimiento water is lower than the local groundwater supply. Use of the higher quality lake water will encourage the elimination of household water softeners which will reduce salt and thereby improve the quality of wastewater discharges to the Salinas River from the City's wastewater treatment plant.

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 $^{^{\}rm 10}$ San Luis Obispo County. "Integrated Regional Water Management Plan." 2007.

Table 4-1. Water Quality Program Objectives Summary 10

	r Quality Program Objectives Summary r Quality Program Goals and Objectives	Summary of Program Objectives				
Location in 2007 SLO IRWM						
Section C. Page 7	Protect and improve source water quality.	Develop an effective source water protection program employing a "multiple barrier" approach to protect source water before contamination occurs, resulting in improved water quality for beneficial uses consistent with regional interests and the Basin Plan ⁵ in cooperation with local and state agencies.				
Section C. Page 8	Meet all federal and state drinking water standards.	Work with local and regional water supply stakeholders to assess compliance with federal and state drinking water quality standards, and provide program-level support in identify deficiencies and needed upgrades to water supply systems.				
Section C. Page 12	Support the development and implementation of Total Maximum Daily Loads (TMDLs).	Identify water bodies within the IRWM region that do not meet Federal Clean Water Act quality standards and support implementation of TMDL projects to address the impairment.				
Section C. Page 13	Implement NPDES Phase II Storm Water Management Programs.	Develop projects with regulated municipal agencies to develop and implement Storm Water Management Programs to reduce pollutants in storm water runoff.				
Section C. Page 16	Implement the California Non-Point Source Discharge (NPS) Plan and the RWQCB Conditional Agricultural Waiver Program for irrigated agriculture.	Support projects cited in the California NPS Plan as being corrective actions to reduce NPS pollution in the region, and work with the agricultural community through monitoring, training, record keeping, and measures to reduce agriculture runoff.				
Section C. Page 16	Comply with new waste discharge requirements.	Work with top wastewater discharge violators to update aging wastewater treatment plants to meet current discharge quality regulations.				

This is a significant secondary benefit because TDS concentrations in wastewater discharges have, at times, exceeded National Pollutant Discharge Elimination System (NPDES) discharge permit limits of 1,115 parts per million (ppm). Use of Lake Nacimiento water in-lieu of groundwater will yield the following long-term water quality program objectives to the Paso Robles groundwater basin. This project supports the following IRWM Water Quality objectives:

- Protect and improve source water quality.
- Meet all federal and state drinking water standards.
- Support the development and implementation of TMDLs.
- Comply with new waste discharge requirements.

Project 2. Attiveh Ranch Conservation Easement

None

Project 3. Livestock and Land Program

The Livestock and Land Program will promote the reduction of nutrient, sediment and pathogen pollution currently impacting the quality of the County's water resources. The project uses a cutting edge social science approach. Community Based Social Marketing (CBSM) identifies the barriers and incentives that affect behavior. Our program applies the CBSM approach to help livestock owners change polluting behavior. The Conservation Districts overcome knowledge barriers by providing technical assistance for water quality site plans and project implementation. Incentives are also provided via public recognition for BMP use and cost share for site improvements. Water quality benefits will be achieved by implementing BMPs on livestock facilities on or near listed waterways and by giving livestock owners the tools to complete water quality site assessments and implement BMPs on their property now and into the future. This allows watersheds of San Luis Obispo County to continue to yield high quality water to the Region, supporting the following IRWM Water Quality Plan objectives:

- Protect and improve source water quality.
- Support the development and implementation of TMDLs.
- Comply with new waste discharge requirements.

Project 4. Shandon State Water Turnout

The Shandon State Water Turnout Project will reduce groundwater pumping from the Paso Basin, which is relied upon as a primary regional water supply source, by introducing a new water supply. The project reduces the community's dependence on the Paso Basin and, therefore, protects the Paso Basin's water quality, which degrades with declining groundwater levels. This allows the Paso Basin to continue to provide high quality drinking water to the region, supporting the following IRWM Water Quality Plan objectives:

- Protect and improve source water quality
- Meet Federal and State drinking water standards

Project 5. San Miguel Community Services District Critical Water System Improvements

The San Miguel Project includes Well 3 Rehabilitation, which includes a new well housing to house the disinfection chemical feed system and will provide adequately disinfected and safe drinking water for the entire community.

With the New Water Well Siting Study a new municipal well will be constructed using the latest well completion technology to reduce groundwater pumping from water bearing strata containing high arsenic and radionuclide concentrations. By working towards constructing a new well with an initial siting study and down-hole investigation, water-bearing zones with high concentrations of these contaminants can be isolated and prevented from passing through the screens of the municipal well.

The San Lawrence Terrace (SLT) New Water Storage Tank will provide a storage reservoir that furnishes water free from arsenic contamination to the entire San Lawrence Terrace portion of the community.

These critical improvements allow the Paso Basin to continue to provide high quality drinking water to San Miguel. A secondary benefit from water quality improvements is the reduction in contaminants from entering the treated waste stream of the SMCSD's wastewater treatment plant. This project supports the following IRWM Water Quality objectives:

- Protect and improve source water quality
- Meet Federal and State drinking water standards
- Support the development and implementation of TMDLs
- Comply with new waste discharge requirements

Project 6. San Simeon Supplemental Water Feasibility Study and Design Project

San Simeon's critical need is to find solutions to reducing and managing salinity intrusion being introduced to the freshwater aquifer of Pico Valley. By removing pathways of contamination either vertically downward from ocean wave action, or horizontally through subsurface ocean water inflow, the SSCSD can run its existing wells longer during the dry months and drought years without exceeding water quality maximum contaminant levels (MCLs) for Chloride. A secondary benefit of salinity reductions is the improved wastewater discharge stream of the SSCSD. This project supports the following IRWM Water Quality objectives:

- Protect and improve source water quality
- Meet Federal and State drinking water standards

4.1.2 Project Goals and Objective Summary Table

Table 4-2. Water Quality Project Goals and Objectives 10

Water Quality Program Goals and Objectives	City of Paso Robles Nacimiento Water Treatment Plant	Attiyeh Ranch Conservation Easement	Livestock & Land Program	Shandon State Water Turn-out	San Miguel Community Services District Critical Water System Improvements	San Simeon Supplemental Water Feasibility Study and Design Project
Protect and	_		_		_	
improve source			•	•		
water quality.						
Meet all federal	_		_	_	_	_
and state drinking			•	•		
water standards.						
Support the						
development and						
implementation of						
TMDLs.						
Implement NPDES						
Phase II Storm						
Water						
Management Programs.						
Implement the						
California NPS Plan						
and the RWQCB						
Conditional						
Agricultural Waiver						
Program for						
irrigated						
agriculture.						
Comply with new						
waste discharge			•			
requirements.						

4.2 WATER SUPPLY PROGRAM

The water supply program supports the goal of reliable and sustainable water supplies for the Region. The water supply objectives are described further in **Table 4-1** and a summary of how each project satisfies the objectives is illustrated **Table 4-7**.

Table 4-3. Water Supply Objectives Summary 10

Water	Supply Program Goals and Objectives	Summary of Program Objectives
Location in 2007 SLO IRWM		
Section C. Page 17	Implement inter-agency projects including emergency inter-ties between systems, jointly developed facilities, water exchanges, and other methods of enhancing reliability through cooperative efforts over the development of new supplies.	Support the progress of inter-agency cooperation and implementation and better utilize existing infrastructure and supplies to achieve long term reliable and sustainable water supplies for the region.
Section C. Page 18	Maximize water conservation for both M&I and agricultural uses.	Support all water conservation activities to manage water demand and meet the challenge of sustainability through efficient use of existing water supplies for urban and agricultural users.
Section C. Page 19	Expand desalination water opportunities by 2010.	Work towards the efficient and cost effective use of desalinized water as part of the long-term water management strategy for the region to reduce imported water supplies.
Section C. Page 19	Expand reclaimed water use to make up 5% of total water use by 2010 and 10% of total water use by 2020.	Work towards the efficient and cost effective use of "drought proof" reclaimed/recycled water as part of the long-term water management strategy for the region to reduce imported water supplies.

4.2.2 Alignment of Individual Project Objectives with Water Supply Objectives

Project 1. Lake Nacimiento Water Treatment Plant

The project will result in the addition of up to 2.4 MGD (4,000 AFY) of supplemental Lake Nacimiento water supply for the City of Paso Robles. The Lake Nacimiento water supply is reliable. It provides a local surface water supply that will reduce the City of Paso Robles's reliance on the stressed Paso Basin and reduces future need to import State Water to the basin.

• Implement inter-agency projects including emergency inter-ties between systems, jointly developed facilities, water exchanges, and other methods of enhancing reliability through cooperative efforts over the development of new supplies.

Project 2. Attiyeh Ranch Conservation Easement

To understand the water supply benefits associated with protecting the Attiyeh Ranch property under its current level of land use and limited future land use changes, a hydrologic model ¹¹ was developed for the project area by Waterways Consulting, Inc. The hydrologic model was used to evaluate changes in runoff volume under the following four land use scenarios: Existing conditions, intensive grazing, vineyards, and ranchette/hobby farm.

The hydrologic modeling was conducted using the U.S Army Corps of Engineers, Hydrologic Engineering Center Hydrologic Modeling System (HEC-HMS) to model the different land use scenarios. The HEC-HMS software is designed to simulate the precipitation/runoff processes of dendritic watershed systems (Corps 2010). The model components include a basin model to represent the physical watershed, a meteorological model to represent how precipitation is generated, and a control specification to define the length of a simulation run. Model outputs include runoff hydrographs that are converted to a volume of runoff for a modeled storm event.

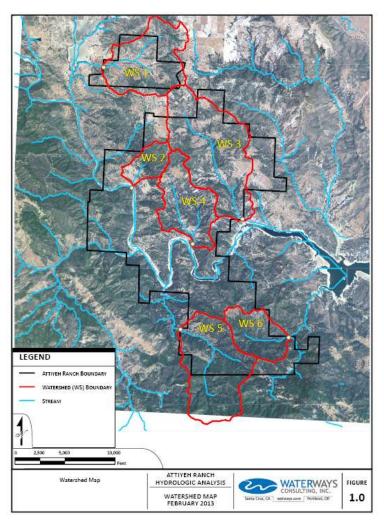


Figure 4-1. Attiyeh Ranch Watershed Map

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Waterways Consulting, Inc. "Attiyeh Ranch Land Use Change Modeling and Analysis." 2013.

The four land use scenarios were modeled at six sub-watersheds within the Attiyeh Ranch. Each land use scenario was run under varying rainfall intensities and runoff volumes were computed. Percent increases in runoff volume from the Attiyeh Ranch were calculated for each potential land use scenario compared to existing conditions. The percent increases estimated for the Attiyeh Ranch were then correlated to precipitation depths from an historic rainfall record and propagated through a water balance developed for Lake Nacimiento (SH+G, 2008). The water balance was used to estimate the volume of additional reservoir spill if a potential land use scenario had been implemented at the Attiyeh Ranch under the historic hydrologic regime.

The primary variables that are used to model runoff processes within the HEC-HMS model are the Composite Runoff Curve Number (CN) and the hydrologic properties of soil. A Geographic Information System is used to composite the values or properties of these variables spatially based on published CN's associated with land cover types and hydrologic soil groups available as part of the NRCS Soil Survey. Summaries of the composite CN's, hydrologic condition of the soil, land cover type, and percent impervious area are included in **Table 4-4**.

Table 4-4. Input variables to the HEC-HMS hydrologic model¹¹

Potential Land Use Scenario	Cover Type		Curve Nu	Percent Impervious			
Ose Scenario		Condition	Α	В	С	D	Area
Existing Conditions	Woods-grass combination	Good	32	58	72	79	0
Intensive Cattle Grazing	Woods-grass combination	Poor	57	73	82	86	0
Vineyards	Row Crop (Contoured)	Poor	70	79	84	88	0
Ranchettes	Woods-grass combination	Fair	43	65	76	82	5

Hydrologic models were developed for six sub-watersheds within the Attiyeh Ranch that encompassed as much of the ranch acreage as possible and were representative of the vegetation and terrain within the ranch. The area of the six sub-watersheds modeled comprises approximately sixty-nine percent of the total Attiyeh Ranch area. Model runs were computed for each sub-watershed under the four land use scenarios using twenty-four hour recurrence interval precipitation depths for a range of storm frequencies from 4-month to 25-year. Runoff volumes were calculated and the percent increase in runoff volume was determined between the potential land use scenarios and existing conditions. The percent increase in runoff for the entire Attiyeh Ranch was then estimated for each land use scenario and recurrence interval by proportioning the results for the six sub-watershed to the acreage total for the Ranch. **Table 4-5** presents the results for the range of storm events assessed.

Table 4-5. Percent Increase in Runoff Volume from Attiyeh Ranch by Potential Land Use 11

24-Hr Recurrence	Percent Increase in Runoff Volume from Attiyeh Ranch (Potential Land Use Scenario vs. Existing Conditions)					
Interval Storm	Intensive Grazing	Vineyard Development	Ranchette Development			
4-month to 1-year	232%	117%	128%			
1-year to 2-year	69%	37%	31%			
2-year to 5-year	50%	27%	21%			
5-year to 10-year	37%	21%	16%			
10-year to 25-year	31%	17%	13%			
≥ 25-year	25%	14%	10%			

A historic water balance ¹², prepared previously for Lake Nacimiento, was used to propagate the percent change in runoff from the Attiyeh Ranch under the potential land use scenarios (**Table 4-6**) to assess if changes in land use results in additional spill from the reservoir. The water balance was constructed using data from 1958 through 2006. A cumulative total of the additional runoff from the Ranch was calculated and added to the reservoir volume on a daily basis. The reservoir elevation was then back calculated. When the reservoir water surface became higher than the spillway at elevation 800.0 feet, the additional runoff from the Ranch was recorded as "additional spill". **Table 4-6** summarizes the water years and volume of additional spill from Lake Nacimiento under the three potential land use scenarios.

Potential land use changes in the watershed could result in an average water supply loss of approximately 200-700 acre-feet per year through reservoir spill. Protecting the existing condition of the watershed through the Attiyeh Ranch conservation easement will maintain natural infiltration into the soil during rain events, avoiding excessive water runoff, and allow water retained in soils to slowly recharge the local waterways/water supply reservoir throughout the year. This project supports the following IRWM Water Supply objective:

• Implement inter-agency projects including emergency inter-ties between systems, jointly developed facilities, water exchanges, and other methods of enhancing reliability through cooperative efforts over the development of new supplies.

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¹² Swanson Hydrology + Geomorphology. "Nacitone Watershed Resources Inventory – First Technical Memorandum – water Resources, Water Quality, and Sediment Supply." 2008.

Table 4-6. Additional Spill from Lake Nacimiento Under Potential Land Use Scenarios at Attiyeh Ranch 12

	Potential Land Use Scenarios							
Water Year	Intensive Grazing		Vineyard Deve	elopment	Ranchette Development			
	Additional Reservoir Spill (acre-ft.)	% of lake volume	Additional Reservoir Spill (acre-ft.) % of lake volume		Additional Reservoir Spill (acre-ft.)	% of lake volume		
1967	1,672	0.44%	360	0.10%	379	0.10%		
1969	11,590	3.07%	3,719	0.98%	3,908	1.03%		
1978	1,286	0.34%	472	0.12%	668	0.18%		
1983	12,033	3.18%	2,237	0.59%	2,351	0.62%		
1998	8,157	2.16%	2,998	0.79%	3,150	0.83%		
2005	115	0.03%	0	0.00%	0	0.00%		
Total	34,853	9.22%	9,786	2.59%	10,455	2.77%		
Average Annual Additional Spill	711 ac-ft/yr		200 ac-ft/yr		213 ac-ft/yr			

Project 3. Livestock and Land Program

None

Project 4. Shandon State Water Turnout

The Shandon State Water Turnout Project will import State Water into the community of Shandon. This new water supply source will improve regional water supply reliability and security by reducing groundwater pumping from the Paso Basin. As Paso Basin groundwater levels decline, the additional water supply source will reduce the risk of competing groundwater rights of local agriculture lands. The new water supply source will also provide water supply reliability and security in the event of intentional or unintentional well contamination, drought, climate change and groundwater water quality changes. This supports the following IRWM Water Supply Program objective:

• Implement inter-agency projects, including emergency interties between systems, jointly developed facilities, water exchanges, and other methods of enhancing reliability through cooperative efforts over the development of new supplies.

Project 5. San Miguel Community Services District Critical Water System Improvements

None

Project 6. San Simeon Supplemental Water Feasibility Study and Design Project

The feasibility/design studies to come out of this proposal will contain a Capital Improvement Program (CIP), prioritized based on increasing water supplies, for the District to follow in the next 5 to 10 years. Alternative projects investigated in the studies will likely include recycled water, water exchanges, water conservation, and desalinization. With these studies, the District will be better situated to apply for federal, state and local grant and loan programs providing assistance to DACs to pursue meeting their CIP schedule.

- Maximize water conservation for both M&I and agricultural uses.
- Expand reclaimed water use to make up 5% of total water use by 2010 and 10% of total water use by 2020.

4.2.3 Project Goals and Objective Summary Table

Table 4-7. Water Supply Project Goals and Objectives 10

Water Supply Program Goals and Objectives	City of Paso Robles Nacimiento Water Treatment Plant	Attiyeh Ranch Conservation Easement	Livestock & Land Program	Shandon State Water Turn-out	San Miguel Community Services District Critical Water System Improvements	San Simeon Supplement al Water Feasibility Study and Design Project
Implement inter-agency projects including emergency inter-ties between systems, jointly developed facilities, water exchanges, and other methods of enhancing reliability through cooperative efforts over the development of new supplies.	•	•		•		
Maximize water conservation for both M&I and agricultural uses.						•
Expand desalination water opportunities by 2010.						
Expand reclaimed water use to make up 5% of total water use by 2010 and 10% of total water use by 2020.						•

4.3 ECOSYSTEM PRESERVATION AND ENHANCEMENT PROGRAM

The Ecosystem Preservation and Enhancement program supports the goal of achieving high quality water for the region through watershed protection and reduced stress on the natural water resources for the Region. The Ecosystem Preservation and Enhancement program objectives are described further in **Table 4-1** and a summary of how each project satisfies the objectives is illustrated **Table 4-9**.

Table 4-8. Ecosystem Preservation and Enhancement Program Objectives Summary 10

Ecosyste	m Preservation and Enhancement Program	Summary of Program Objectives
2007 SLO IRWM	Goals and Objectives	
Section C. Page 20	Purchase and conserve through easements, preserve, enhance, and restore land in ecologically sensitive ecosystems.	Support the efforts that are designed to protect, enhance, and restore estuarine, marine and coastal ecosystems from various forms of use and development that have the potential to damage these ecosystem resources.
Section C. Page 21	Manage public lands access to encourage public involvement and stewardship.	Develop programs that emphasize the appreciation for and responsibilities of the San Luis Obispo region to manage public land access and promote environmental stewardship of the region's ecosystem resources.
Section C. Page 22	Manage stream flows to fish bearing streams, support a region-wide fish passage barrier prevention, circumvention and removal program, and implement fish friendly stream and river corridor restoration projects.	Develop programs that increase protection and improvements to important wildlife habitats by ensuring that instream flows are adequate to maintain sustainable populations of key aquatic species and reduce the negative effects of human activities.
Section C. Page 23	Reduce the effects of invasive plant species, manage public properties to re-establish rare and special status native plant populations, and promote native drought tolerant plantings in municipal and residential landscaping.	Develop programs to enhance existing efforts to control invasive plant species that threaten water quality and water supply by damaging riparian and aquatic zones in creeks, rivers, and lakes.
Section C. Page 24	Implement the San Luis Obispo County Native Tree Management Guidelines and promote the voluntary guidelines in the San Luis Obispo County Native Tree Resolution for tree protection and restoration programs, urban forest management, and wild lands fire management.	Develop programs to continue implementation of existing forest and tree protection plans and ordinances through educational and rural landowner tree conservation and enrichment programs, and urban municipality tree enrichment projects throughout the region.
Section C. Page 25	Reuse reclaimed mine lands for beneficial purposes.	Develop programs which seek to identify long-term beneficial uses for abandoned mining lands, such that these sites can restored to active use for a variety of uses, including recreation, groundwater recharge, agriculture, or urban/industrial development.
Section C. Page 26	Conserve natural resources.	Develop programs to improve the ecological condition of existing open space areas as well as increase the inventory of these lands.

4.3.2 Alignment of Individual Project Objectives with Ecosystem Preservation and Enhancement Program Objectives

Project 1. Lake Nacimiento Water Treatment Plant

None

Project 2. Attiveh Ranch Conservation Easement

Numerous natural ecosystems exist on the Attiyeh Ranch, including over 4,600 acres of oak woodlands. Of this value, over 400 acres consists of valley oak woodlands, listed as a "G3S3 community" (highly impaired and regeneration is not sustainable as a result of habitat conversion and inconsistent land management practices) by the California Department of Fish and Wildlife, formerly the California Department of Fish and Game, and the California Native Plant Society. The County's Voluntary Oak Woodlands Management Plan¹³ was "designed to encourage the long-term conservation of oak woodlands and recognizes that farming, ranching, and grazing operations can be compatible with oak woodland conservation." This plan further states "the County should encourage and support efforts by non-profit and other conservation organizations to protect agricultural lands and maintain agricultural productions."

The Attiyeh Ranch includes over six (6) miles of Nacimiento River and a highly desirable recreation area of Nacimiento Reservoir known as "The Narrows". Lake Nacimiento is described in the IRWMP as a valuable recreational resource with inter-regional significance (owned and operated by Monterey County Water Resources Agency, but is entirely within San Luis Obispo County boundaries). The conservation easement will forever preserve the water front as scenic open space for recreationalists to enjoy. Nacimiento Reservoir's recreational features will be enhanced as the Attiyeh Ranch conservation easement will allow the public to gain access to the ranch during three (3) docent-led hikes to be scheduled throughout the year. This would increase the amount of open space accessible to the public in the Nacimiento Reservoir area and allow the public to enjoy vast open space not otherwise accessible.

The Attiyeh Ranch provides habitat for numerous wildlife species, including bald eagles, mule deer, bobcat, mountain lions, and bear which have been observed on the ranch. The ranch is composed of oak woodland and savannah vegetative communities, as well as chaparral, valley grassland, riparian, and freshwater wetlands. The rich vegetative communities on the Attiyeh Ranch offer refuge, forage, and habitat to numerous wildlife species and provide a critical wildlife corridor along the Central Coast. The California Essential Habitat Connectivity Project¹⁴ (2005) has identified two essential wildlife migration corridors directly adjacent to the Attiyeh ranch, known as "linkages" (**Figure 4-2**). The first linkage represents wildlife migration through the Los Padres National Forest along the Big Sur coast to San Geronimo, and the second linkage extends from Weferling Canyon, in Monterey County, south to San Geronimo. Preservation of the ranch would protect natural resources needed by wildlife to support wildlife migration throughout the area and prevent habitat fragmentation.

• Purchase or conserve through easements, preserve, enhance, and restore land in ecologically sensitive ecosystems.

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¹³ Native Tree Committee of San Luis Obispo County. "County of San Luis Obispo Voluntary Oak Woodlands Management Plan." 2003.

¹⁴ Spencer, W.D., P. Beier, K. Penrod, K. Winters, C. Paulman, H. Rustigian-Romsos, J. Strttholt, M. Parisi, and A. Pettler. "California Essentail Habitat Connectivity Project: A Strategy for Conserving a Connected California." 2010.

- Manage stream flows to fish bearing streams, support a region-wide fish passage barrier prevention, circumvention and removal program, and implement fish friendly stream and river corridor restoration projects.
- Manage public land access to encourage public involvement and stewardship.
- Conserve natural resources.

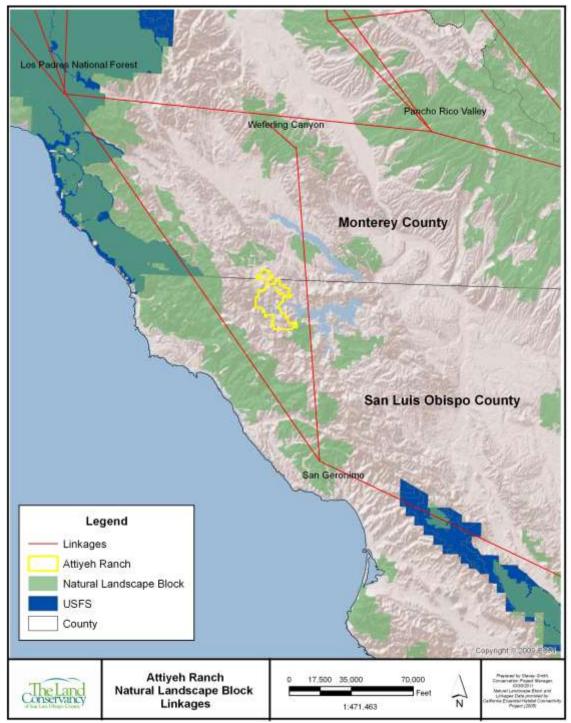


Figure 4-2. Wildlife Migration Corridor Linkages Surrounding Attiyeh Ranch.

Project 3. Livestock and Land Program

The Livestock and Land Program will help to educate livestock owners on the importance of reducing their facilities potential impact of sediment, nitrogen and pathogen loading on surrounding waterways. This increased awareness is expected to reduce effects of livestock facilities on local ecosystems and streams. This supports the following IRWM Ecosystem Preservation and Enhancement Program objectives:

- Manage stream flows to fish bearing streams, support a region-wide fish passage barrier prevention, circumvention and removal program, and implement fish friendly stream and river corridor restoration projects...
- Conserve natural resources.

Project 4. Shandon State Water Turnout

None

Project 5. San Miguel Community Services District Critical Water System Improvements

None

Project 6. San Simeon Supplemental Water Feasibility Study and Design Project

In addition to physical improvements, feasibility/design studies will also look at measures to protecting the water quality in the Pico Creek watershed. This may include capturing stormwater using detention and recharge basins, and public education and awareness on the harm from polluting the creek or groundwater with poor disposal practices.

 Manage stream flows to fish bearing streams, support a region-wide fish passage barrier prevention, circumvention and removal program, and implement fish friendly stream and river corridor restoration projects.

4.3.3 Project Goals and Objective Summary Table

Table 4-9. Ecosystem Project Goals and Objectives 10

Table 4-9. Ecosystem Project Goals and						
Ecosystem Preservation and Enhancement Program Goals and Objectives	City of Paso Robles Nacimiento Water Treatment Plant	Attiyeh Ranch Conservation Easement	Livestock & Land Program	Shandon State Water Turn-out	San Miguel Community Services District Critical Water System Improvements	San Simeon Supplemental Water Feasibility Study and Design Project
Purchase and conserve through						
easements, preserve, enhance,						
and restore land in ecologically		•				
sensitive ecosystems.						
Manage public lands access to						
encourage public involvement						
and stewardship.						
Manage stream flows to fish						
bearing streams, support a						
region-wide fish passage barrier						
prevention, circumvention and						
removal program, and		•				•
implement fish friendly stream						
and river corridor restoration						
projects.						
Reduce the effects of invasive						
plant species, manage public						
properties to re-establish rare						
and special status native plant						
populations, and promote						
native drought tolerant						
plantings in municipal and						
residential landscaping.						
Implement the San Luis Obispo						
County Native Tree						
Management Guidelines and						
promote the voluntary						
guidelines in the San Luis Obispo						
County Native Tree Resolution						
for tree protection and						
restoration programs, urban						
forest management, and wild						
lands fire management.						
Reuse reclaimed mine lands for						
beneficial purposes.						
Conserve natural resources.		•				

4.4 GROUNDWATER MONITORING AND MANAGEMENT

The Groundwater Monitoring and Management program supports the goal of ensuring that the groundwater basin plan objectives and IRWMP groundwater goal can be attained and maintained to ensure the region's groundwater resources remain suitable and sustainable for their continued use. The Groundwater Monitoring and Management program objectives are described further in **Table 4-10** and a summary of how each project satisfies the objectives is illustrated **Table 4-11**.

Table 4-10. Groundwater Monitoring and Management Objectives Summary 10

	ater Monitoring and Management Program	Summary of Program Objectives
	Goals and Objectives	
Location in 2007 SLO IRWM		
Section C. Page 28	Develop monitoring and reporting programs for groundwater basins in the region.	Seek to develop a program to obtain unlimited permission from each of the county's well owners for releasing or publishing groundwater elevation and quality data.
Section C. Page 29	Evaluate and consider Groundwater Banking Programs.	Seek opportunities to store surplus water which can be made available in drier years or at other times when a regular source of supply is interrupted.
Section C. Page 29	Protect and improve groundwater quality from point and non-point source pollution, including nitrate contamination; MTBE and other industrial, agricultural, and commercial sources of contamination; naturally occurring mineralization, boron, radionuclide, geothermal contamination; and seawater intrusion and salts.	Seek to reduce point and NPS of groundwater pollution through strategies which reduce the risk and protect the quality of the regions groundwater supplies.
Section C. Page 29	Conduct public education and outreach about ground water protection.	Seek to improve public information and education programs in critically threatened groundwater resource locations to inform residents about groundwater protection and issues, their responsibilities, best management practices, and how to get assistance.
Section C. Page 30	Identify areas of known or expected conflicts and target stakeholders on specific actions that they should take to help protect groundwater basin quality and supply.	Seek to providing expertise, historical data and facilitation for the pursuit of cooperative resolution of groundwater issues that have been the subject of litigation for the beneficial implementation of settlement agreements and to develop cooperative agreements among stakeholders in groundwater areas where litigation may be imminent.
Section C. Page 30	Recharge groundwater with high quality water.	Seek to protect recharge areas and ensure the highest quality of water in those recharge areas.

4.4.2 Alignment of Individual Project Objectives with Groundwater Monitoring and Management Program Objectives

Project 1. Lake Nacimiento Water Treatment Plant

The project will result in the addition of up to 2.4 MGD (4,000 AFY) of supplemental Lake Nacimiento water supply for the City of Paso Robles. The reliable water supply source provides a local surface water supply that will reduce the City of Paso Robles's reliance on the stressed Paso Basin and reduces future need to import State Water to the basin. This is a benefit that will be realized by all basin users, but the reduced groundwater pumping.

• Identify areas of known or expected conflicts and target stakeholders on specific actions that they should take to help protect groundwater basin quality and supply.

Project 4. Attiyeh Ranch Conservation Easement

None

Project 3. Livestock and Land Program

None

Project 4. Shandon State Water Turnout

The County participates in a rigorous regional groundwater monitoring and reporting program within the Paso Basin. This program, known as the Paso Robles Groundwater Basin Management Plan⁵, includes monitoring groundwater levels in and near Shandon and will continue after the Shandon State Water Turnout Project is functional in order to assess the health of the Paso Basin and the impacts of the project. This Project, which is included in the Basin Management Plan, will import State Water, thereby reducing groundwater pumping from the Paso Basin. By reducing groundwater pumping, Shandon will be taking part in a region-wide effort to manage Paso Basin groundwater use. Although the project primarily benefits the IRWM Water Supply Program, these project aspects also support the following IRWM Groundwater Monitoring and Management Program objectives:

- Develop monitoring and reporting programs for groundwater basins in the region.
- Identify areas of known or expected conflicts and target stakeholders on specific actions that they should take to help protect groundwater basin quality and supply.

Project 5. San Miguel Community Services District Critical Water System Improvements

None

Project 6. San Simeon Supplemental Water Feasibility Study and Design Project

As part of the planning studies, groundwater management elements will be introduced as an important first step in managing the groundwater basin and developing a Groundwater Management Plan with Basin Management Objectives (BMOs) that are protective of the

groundwater resource and the sustainable yield in dry and critical hydrologic years. The BMOs will consider all of the IRWMP Groundwater Monitoring and Management Program goals and objectives.

- Protect and improve groundwater quality from point and non-point source pollution, including nitrate contamination; MTBE and other industrial, agricultural, and commercial sources of contamination; naturally occurring mineralization, boron, radionuclide, geothermal contamination; and seawater intrusion and salts.
- Recharge groundwater with high quality water.

4.4.3 Project Goals and Objective Summary Table

Table 4-11. Groundwater Project Goals and Objectives 10

Groundwater Monitoring and Management Program Goals and Objectives	City of Paso Robles Nacimiento Water Treatment Plant	Attiyeh Ranch Conservation Easement	Livestock & Land Program	Shandon State Water Turn-out	San Miguel Community Services District Critical Water System Improvements	San Simeon Supplemental Water Feasibility Study and Design Project
Develop monitoring and						
reporting programs for						
groundwater basins in the						
region.						
Evaluate and consider						
Groundwater Banking Programs.						
Protect and improve						
groundwater quality from point						
and non-point source pollution,						
including nitrate contamination;						
MTBE and other industrial,						
agricultural, and commercial						
sources of contamination;						
naturally occurring						
mineralization, boron,						
radionuclide, geothermal						
contamination; and seawater						
intrusion and salts.						
Conduct public education and						
outreach about ground water						
protection.						
Identify areas of known or						
expected conflicts and target						
stakeholders on specific actions	•					
that they should take to help						
protect groundwater basin						
quality and supply.						
Recharge ground water with						
high quality water.						

4.5 FLOOD MANAGEMENT

The Flood Management program recognizes that flood protection as a high priority for the Region. As such, the Flood Management objectives recognize that local financing options are limited, community support is critical, and other watershed benefits need to be integrated into flood protection measures. Related projects were not prioritized for this round of funding. The Flood Management program objectives are described further in **Table 4-12**.

Table 4-12. Flood Management Objectives Summary 10

Table RD	-4. Flood Management Program Goals and Objectives	Summary of Program Objectives
Location in 2007 SLO IRWM		
Section C. Page 31	Distinguish the root cause of flooding problems stemming from new development, existing development, and mandatory regulation.	Form the basis for integrated and broad solution flood management to adequately address property owner and developer responsibilities, and propose an integrated watershed approach that incorporates flood management, water quality, water supply, groundwater, and ecosystem protection and enhancement issues on a watershed/basin scale.
Section C. Page 31	Integrate ecosystem enhancement, drainage control, and natural recharge into development projects.	Develop new projects and maintenance of existing facilities through ecosystem compatible elements which assist in protecting and enhancing improved drainage and natural groundwater recharge.
Section C. Page 32	Develop financial programs for drainage and flood control projects.	Seek federal and state funding through political processes and local community advocacy groups.
Section C. Page 32	Evaluate and minimize the risk of dam and levee failures.	Develop and update guidelines and regulations for maintenance of dam and levee safety, and emergency plans for the potential failure of a dam structure.
Section C. Page 32	Develop and implement public education, outreach, and advocacy.	Develop education materials and public outreach to bring awareness to private property owner responsibilities and best management practices, and support local advocacy groups who recognize the flooding problem and seek specific project solutions.

4.5.2 Alignment of Individual Project Objectives with Flood Management Objectives

Project 1. Lake Nacimiento Water Treatment Plant

None

Project 2. Attiveh Ranch Conservation Easement

• None

Project 3. Livestock and Land

• None

Project 4. Shandon State Water Turnout

• None

Project 5. San Miguel Critical Water System Improvements

• None

Project 6. San Simeon Supplemental Water Feasibility Study and Design Project

• None

Chapter 5. COMPLETED WORK AND EXISTING STUDIES

This section describes the work that has been completed or is expected to be completed prior to the projected grant award date of October 2013. To be consistent throughout the work plan, the completed work for each project uses the same task breakdown as the proposed work section. All final supporting documentation is included as appendices to the work plan.

Of the proposal's six projects, only three have been begun with various degrees of completion on project elements. The following is a completed work description for City of Paso Robles Nacimiento Water Treatment Plant, Shandon State Water Turn-out, and San Miguel Community Services District Critical Water System Improvements. Each project includes the following tasks:

- Task 1: Administration
- Task 5: Land Purchase / Easement
- Task 6: Assessment and Evaluation
- Task 7: Final Design
- Task 8: Environmental Documentation
- Task 9: Permitting
- Task 11: Construction

Tasks 2, 3, 4 and 10 pertain only to the administration of the labor compliance, grant reporting, project performance monitoring and construction contracting to satisfy the grant, respectively. Additional tasks (i.e., Tasks 12 and 13 of Work Plan) are for environmental compliance and administration of the construction contracts and monthly reporting in accordance with existing contracting and reporting procedures.

Task 9 pertains to identification and compliance with local, state and federal permits. The projects as proposed do not require any permits other than local permits to proceed with construction. However, the applicant is fully aware of the Federal and State regulatory roles and if at any time our assessment changes all necessary permits, including Section 10 Harbor Act, Section 7 biological consultation, Section 404, on the federal side and 401 Certificate, 1601 and/or 1602 of Department of Fish and Wildlife, will be obtained.

5.1 CITY OF PASO ROBLES NACIMIENTO WATER TREATMENT PLANT **COMPLETED WORK**

Project Status Summary - City of Paso Robles Nacimiento Water Treatment Plant

The City of Paso Robles is the lead agency for the completion of the Lake Nacimiento Water Through use of local match dollars, planning, environmental and Treatment Plant Project. design studies have been completed to position the City for immediate implementation of the construction bid and award process upon award of the grant funding in October 2013. The efforts below support the project specific work plan tasks to achieve project completion by November 2014.

Task 1. Administration

The City has performed a variety of administrative tasks to manage the scope, schedule and budget of the Nacimiento Water Treatment Plant Project and to communicate its progress to the involved stakeholders and agencies involved in project delivery. Specifically, the City has performed the following administrative work efforts:

- Project Management: Project scope creation, cost estimating and tracking, schedule preparation and tracking, budgeting and financing, and coordination and review of all completed project tasks.
- Communication: Communication, meetings and reporting to coordinate and provide updates to the City Council.
- Contracts and Agreements: Preparation and finalization of the following consultant, construction and other contracts required for project implementation and design:
 - o Treatment Plan Design Contract with AECOM Inc
 - Other Administration work efforts needed to complete the project are fully described in the Proposed Work.

Deliverables:

Description	Schedule
Water Supply Agreement ¹⁵	May 1992
Water Treatment and Local Facilities Agreement 16	March 1992
Utility Reimbursement Agreement for Design Services ¹⁷	August 2012
Agreement for Construction, Operation and Maintenance ¹⁸	April 2013

¹⁵ San Luis Obispo County Flood Control and Water Conservation District. "Water Supply Agreement Between San Luis Obispo County Flood Control and Water Conservation District and County of San Luis Obispo." 1992.

¹⁶ San Luis Obispo County Flood Control, Water Conservation District, and County of San Luis Obispo. "Water Treatment and Local Facilities Agreement." 1992.

¹⁷ Central Coat Water Authority and County of San Luis Obispo. "Utility Reimbursement Agreement for Design Services." 2012.

Department of Water Resources. "Construction, Operation, and Maintenance of the Shandon Turnout." 2013.

City of Paso Robles Nacimiento Water Treatment Plant, Continued

Task 5. Land Purchase / Easement

No land purchases are required for completion of this project. The water treatment plant will be constructed on a 21-acre site the City of Paso Robles has owned for many years (see project map). The Paso Robles Nacimiento Water Project water delivery turnout is also located on the plant site. A water line crossing agreement (easement) with the Union Pacific Railroad (UPRR) will be acquired prior to construction for a treated water main that will be constructed as part of the project.

Deliverables:

Description	Schedule
Union Pacific Railroad Agreement Easement	October 2013

Task 6. Assessment and Evaluation

A complete evaluation of water supply project alternatives for the City was performed in the screening analysis completed as part of the EIR for the Nacimiento Water Project.¹⁹ The following water supply alternatives were evaluated:

- State Water Project through the Coastal Branch
- Desalination of Sea Water
- Reclamation of Waste Water
- Enlargement of Salinas Dam
- Enlargement of Lopez Dam
- Enlargement of Nacimiento Dam
- Possible construction of new reservoirs
- Weather Modification

On April 5, 2011, Paso Robles's City Council approved a five-year schedule of water rate increases necessary to fund the construction and operation of the water treatment plant project. The Prop 218 process was completed prior to that date.

Deliverables:

Description	Schedule
City Council Meeting Minutes	April 5, 2011
Project Alternative Screening Analysis	August 2011
Water Rate Study	April 5, 2011

¹⁹Marine Research Specialists. "Nacimiento Water Project – Environmental Impact Report." 2003. http://www.slocounty.ca.gov/Assets/PW/NacProject/EIR+Alternatives.pdf>

City of Paso Robles Nacimiento Water Treatment Plant, Continued

Task 7. Final Design

The Nacimiento water treatment plant will have a capacity of 2.4 million gallons per day (mgd). The treatment technologies and methods to be employed include: 1) dissolved air floatation pretreatment for Total Organic Carbon (TOC) removal, 2) microfiltration membrane filtration, 3) granular activated carbon for post filtration treatment for Disinfection Byproduct (DBP) control. The major facilities and components to be constructed as part of the project include:

- Dissolved air flotation (DAF) facilities
- DAF residuals buffering tank/basin
- Membrane filtration building and facilities
- Membrane concentrate neutralization system
- Granular activated carbon filtration facilities
- Treated water (clearwell) storage tank
- High service finished water booster pumping station

A project site Geotechnical report will be completed as part of the project design contract by April 30, 2013. Additional information on project design standards and individual plant components is available in the final design report. Note: The capacity of the plant was increased to 2.4 MGD but other aspects of the plant design standards described in this document remain in effect.

Deliverables:

Description	Schedule
Plans, Specifications & Estimates (PS&E): 30% Design	Completed
Geotechnical Report	Completed
PS&E: 60% Design	April 2013
PS&E: 90% Design	June 2013
PS&E: Final Design (Bid Ready)	October 2013

City of Paso Robles Nacimiento Water Treatment Plant, Continued

Task 8. Environmental Documentation

The County's existing allocation of Lake Nacimiento water was identified in the Paso Robles UWMPs as the most feasible and cost-effective supply alternative. A comprehensive water supply alternatives evaluation was done as part of the EIR for the Nacimiento Water Project¹⁹.

The Nacimiento Water Project was selected because of its high rankings with regard to anticipated water yield, water supply reliability, estimated cost, and ease of environmental and Additional information on the alternatives evaluation can be found in regulatory permitting. the Nacimiento Project EIR.

Another study²⁰ was conducted in 2008 to examine potential environmental and other impacts of the water treatment plant project. Based on the factual presentation of the August 2011 AECOM Feasibility Study alternatives analysis²¹, the recommended alternative is compliant with the 2008 CEQA Study²⁰. The AECOM study included analysis of the following key elements:

- 1. Project Description
- 2. Environmental Analysis
- 3. Local Stream Fisheries
- 4. Groundwater Resources
- 5. Growth Inducement Potential and Secondary Effects of Growth
- 6. Alternatives Analysis
- 7. Other CEQA Issues (e.g., Cumulative Impacts, Unavoidable Adverse Impacts, etc.)

The findings of the study show that although the project could have a significant effect on the environment, there will not be a significant effect in this case because of the project-specific mitigation measures.

There is no required mitigation work previously done or that needs to be done in advance of construction.

Deliverables:

Description	Schedule
Final Initial Study/Mitigated Negative Declaration 20	December 2008

²⁰ City of El paso de Robles. 'Final Initial Study/Mitigated Negative Declaration – Paso Robles Water Treatment Plant and main East Pipeline Project." 2008.

http://www.prcity.com/government/departments/publicworks/pdf/WaterTreatmentPlantMND.pdf 21 City of Paso Robles and AECOM. "City of Paso Robles – 2.0-MGD Nacimiento WTP Feasibility Study." 2011.

Task 9. Permitting

No permits are required for the project other than the easement agreement from the Union Pacific Railroad (UPRR) in Task 5 above. This agreement will allow for the construction of a pipeline within the UPRR right-of-way.

Deliverables:

None

Task 11. Construction

No project construction will take place prior to the grant award date of October 2013.

Deliverables:

None

5.2 ATTIYEH RANCH CONSERVATION EASEMENT

Project Status Summary – Attiyeh Ranch Conservation Easement

A description of the work that has been completed or is expected to be completed prior to October 1, 2013 is described for each task as follows:

Task 1. Administration

Waterways Consulting, Inc. was hired by The Land Conservancy and Bob Attiyeh in January, 2013, to conduct a hydrology study of the Attiyeh Ranch. The Land Conservancy is managing this consultant's contract, and anticipates completion of the study report in April, 2013. Data from this study were used to inform this grant application and will be used to develop the Adelaida Conceptual Area Protection Plan (CAPP). Development of the CAPP is work in progress to be completed by October 2013, and is described further under the completed work for Task 6.

Deliverables:

Description	Schedule
Hydrology Study of the Attiyeh Ranch ¹¹	April 2013

Attiyeh Ranch Conservation Easement, Continued

Task 5. Land Purchase / Easement

The Attiyeh Ranch conservation easement project was reviewed by Land Conservancy's Land Committee and Board of Trustees composed of legal advisors, planners, and natural resource specialists. The project was adopted in May 2009. The conservation easement encumbers 47 separate parcels totaling approximately 8,305 acres. The property boundaries are clearly delineated and surveying of the property boundary is not required. A Preliminary Title Report has been ordered through First American Title Company. No mortgages or liens exist on the ranch necessitating subordination. The parcel list, associated parcel maps, and schedule of project costs were approved by the landowner. The draft conservation easement language was reviewed by the landowner with no substantive changes made. A surveyor will be hired by June, 2013 to delineate eight building envelopes that are "excepted" from the conservation easement. These areas total approximately 27 acres of the existing headquarters and associated ranch buildings, as well as three additional areas totaling nine (9) acres reserved for the Attiyeh family's private use. Although these tasks will be initiated, some revisions and updates are possible up to the date of closing the conservation easement.

Deliverables:

None

Task 6. Assessment and Evaluation

The California Department of Fish and Wildlife has expressed interest in partnering in the Attiyeh Ranch conservation easement acquisition. It is their requirement that The Land Conservancy develops a Conceptual Area Protection Plan (CAPP) for the Adelaida area wherein key conservation properties surrounding the Adelaida and Lake Nacimiento areas, including the Attiyeh Ranch, are identified. By October 2013, The Land Conservancy will have completed the Adelaida CAPP and will have submitted the grant proposal to the Wildlife Conservation Board for the Attiyeh Ranch conservation easement.

A contemporary appraisal will be completed in which the best and highest use of the ranch will be determined to calculate the maximum value of the ranch if it were to be developed. The appraisal will also contemplate the restrictions described in the conservation easement. These restrictions will determine the reduced value of the ranch once the conservation easement encumbers the property. A contemporary conservation easement value will be determined based on the difference of these two values.

Deliverables:

Description	Schedule
Adelaida CAPP	October 2013
Contemporary Appraisal	October 2013

Attiyeh Ranch Conservation Easement, Continued

Task 7. Final Design

No engineering or design is required for this project.

Deliverables:

None

Task 8. Environmental Documentation

There will be no work on Environmental Documentation prior to October 1, 2013.

Deliverables:

None

Task 9. Permitting

There are no environmental and/or construction permits required to record the Attiyeh Ranch conservation easement.

Deliverables:

None

Task 11. Construction

There will be no work on Construction prior to October 1, 2013.

Deliverables:

None

5.3 SHANDON STATE WATER TURN-OUT COMPLETED WORK

Project Status Summary - Shandon State Water Turn-out

In response to regional and local groundwater supply concerns, CSA 16 contracted with the San Luis Obispo County Flood Control and Water Conservation District (SLO District) in 1992 to obtain an allocation of 100 acre-feet per year (AFY) of State Water from the Coastal Branch of the State Water Project for the Shandon community. At the same time, the 1992 State Water Project Coastal Branch, Phase II, Local Distribution Lines and Facilities Final Environmental Impact Report²² was prepared to provide for construction of a turnout facility to connect Shandon to the State Water Project (SWP). Subsequently, the State Department of Water Resources (DWR) completed a design of the turnout facility in 1993. DWR planned to construct the Shandon turnout as part of construction of the Coastal Branch of the State Water Project²³, but Shandon had to cancel facility construction in 1995 due to financial issues.

After the Paso Robles Groundwater Basin Management Plan⁵ was completed and the Paso Basin was officially certified as a Level of Severity III water supply in 2011, the County Board of Supervisors approved a request from Shandon to re-initiate implementation of the State Water Turnout Project. Project development is now underway and final design is anticipated to be complete by June 2013.

Task 1. Administration

The County has performed a variety of administrative tasks to manage the scope, schedule and budget of the Shandon State Water Turnout Project and to communicate its progress to the involved stakeholders and agencies involved in project delivery. Specifically, the County has performed the following administrative work efforts:

- Project Management: Project scope creation, cost estimating and tracking, schedule preparation and tracking, budgeting and financing, and coordination and review of all completed project tasks.
- Communication: Communication, meetings and reporting to coordinate and provide updates to the County Board of Supervisors, Shandon Advisory Council, DWR and other involved parties.
- Contracts and Agreements: Preparation and finalization of the following consultant, construction and other contracts required for project implementation and design:
 - Water Supply Agreement¹⁵ (May 1992): Provides 100 AFY State Water allocation for
 - Water Treatment and Local Facilities Agreement (March 1992): Provides for treatment of Shandon's State Water allocation.
 - Utility Reimbursement Agreement for Design Services¹⁷ (August 2012): Provides for management and performance of complete project design by Central Coast Water Authority (CCWA), including coordination with DWR and subconsulting with a professional engineering company.
 - Agreement for Construction, Operation and Maintenance of the Shandon Turnout¹⁸: Provides the requirements for construction, operation and maintenance of the Shandon State Water Turnout
 - facility between CCWA, County and DWR.

²² County of San Luis Obispo. 'Final Environmental Impact Report – State Water Project Coastal Branch (Phase II) Local Distribution Lines and Facilities." 1992.

Department of Water Resources. "Pipeline Reach 2-Cholame Valley to Shedd Canyon – Shandon Turnout." 1993.

Shandon State Water Turnout, Continued

Other Administration work efforts needed to complete the project are fully described in the Proposed Work section.

Deliverables:

Description	Schedule
Water Supply Agreement ¹⁶	May 1992
Water Treatment and Local Facilities Agreement ¹⁷	March 1992
Utility Reimbursement Agreement for Design Services ¹⁸	August 2012
Agreement for Construction, Operation and Maintenance ¹⁹	April 2013

Task 5. Land Purchase / Easement

The County performed an internal assessment of the need to purchase right-of-way for the Shandon State Water Turnout Project and found no land or easements need to be acquired to complete the project. All improvements made and facilities constructed for the Shandon State Water Turnout Water Project will be constructed within existing County right-of-way and State Department of Water Resources right-of-way.

Deliverables:

None

Task 6. Assessment and Evaluation

A complete evaluation of water supply project alternatives for Shandon was performed in 1992 as part of the State Water Project Coastal Branch, Phase II, Local Distribution Lines and Facilities Final Environmental Impact Report²². Obtaining State Water from the Coastal Branch of the State Water Project via the Shandon State Water Turnout Project was selected as the preferred alternative because of its overall rankings in water supply reliability, project cost, water quality, engineering constraints and environmental impacts. The following water supply alternatives were evaluated:

- Whale Rock Exchange
- Delivery of Water from Nacimiento Reservoir
- Jack Creek Reservoir
- Santa Rita Reservoir
- Lopez Reservoir Enlargement
- Wastewater Reclamation
- Desalination
- Increased Water Conservation

In 1993, DWR completed a design for the Shandon Turnout facility that proved to be economically infeasible for the community of Shandon. In January 2013, a value engineering design meeting was held between the County, CCWA and AECOM (the design sub-consultant) to discuss design alternatives that would make the project economically feasible. The meeting minute's document discussed alternatives, including selection of the preferred alternative.

Shandon State Water Turnout, Continued

Deliverables:

Description	Schedule
Preliminary Design Alternatives Meeting Minutes	February 2013

Task 7. Final Design

On August 28, 2011, the County entered into a Utilities Reimbursement Agreement for Design Services with CCWA to manage and perform complete design and design review for the Shandon State Water Turnout Project, including coordination with DWR to obtain final design approval. Under this agreement, CCWA retained a professional engineer (AECOM) to prepare and complete a final design package for the project. The design was based on DWR's 1993 Shandon Turnout design and was modified to make the project more economically feasible to construct. Final design efforts included:

- Preliminary Design Workshop
- 60% Design Submittal and Review
- 90% Design Submittal and Review
- Final Design Submittal

Since the Shandon Turnout facility will connect to DWR's SWP pipeline and will be located within DWR right-of-way, DWR required that the County pay for their review and approval of the project design. DWR has reviewed and approved the design. Costs paid to DWR for this activity are not included in this grant request.

Deliverables:

Description	Schedule
1993 DWR Shandon Turnout Design Plans	1993
60% Design Plans, Specifications and Estimate	March 2013
90% Design Plans, Specifications and Estimate	May 2013
Final Design Plans, Specifications and Estimate	June 2013
DWR Design Approval Letter	June 2013

Task 8. Environmental Documentation

In 1992, the County Board of Supervisors adopted the State Water Project Coastal Branch, Phase II, Local Distribution Lines and Facilities Final Environmental Impact Report²² (1992 Shandon Turnout FEIR), which included the Shandon State Water Turnout Project. The 1992 Shandon Turnout FEIR met all CEQA requirements for the project at the time; however, implementing the project nearly 20 years after the report was adopted demanded that it be reviewed and updated. In October 2012, the County reviewed the 1992 Shandon Turnout FEIR and prepared the Addendum to the EIR for the Shandon (CSA 16) State Water Turnout

Shandon State Water Turnout, Continued

Project²⁴ (2012 EIR Addendum). In summary, the 2012 EIR Addendum found no new significant impacts and completed required CEQA documentation for the project.

Deliverables:

Description	Schedule
1992 Shandon Turnout FEIR	1992
2012 EIR Addendum	October 2012

Task 9. Permitting

During preparation of the environmental documentation and final design, the County assessed all potential project impacts. It was determined that the Shandon State Water Turnout Project does not impact any regulated resources and, therefore, does not require any environmental permits. The County's Environmental Division prepared an Environmental Permit Summary Form to document this assessment.

Deliverables:

Description	Schedule
Environmental Permit Summary Form	June 2013

Task 11. Construction

The Shandon State Water Turnout Project facility construction has not yet been completed. However, in order to fully implement project construction, the County had to undertake construction of CSA 16 water treatment system improvements. Prior to construction of these improvements, CSA 16 treated groundwater with free chlorine. Since State Water is treated with chloramines, it was necessary to install system improvements that convert CSA 16's treatment to chloramine treatment. Mixing the two treatments can cause public health problems. Construction of CSA 16 chloramine treatment improvements included the following:

- Chemical building
- Chemical mixers
- Chemical pumps
- Ammonia chemical tank
- Piping and fittings
- Supervisory Control and Data Acquisition (SCADA) improvements

Other Construction work efforts needed to complete the project are fully described in the

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²⁴ Department of Public Works. "Addendum to the EIR for the County of San Luis Obispo – Shandon (CSA) State Water Turnout Project ED 90-649 (300462)." 2012.

Proposed Work secti	on
Deliverables:	

None

5.4 SAN MIGUEL COMMUNITY SERVICES DISTRICT CRITICAL WATER SYSTEM IMPROVEMENTS COMPLETED WORK

Project Status Summary - San Miguel Community Services District Critical Water System Improvements

The San Miguel Water System Improvements Project consists of various critical water system improvements which have been identified over the past 10 years as being critical to the continued operations of retailing safe drinking water supplies. In 2013, there are six projects identified and combined into a single project that will directly improve drinking water supply reliability and water quality for the small community of San Miguel. The project will ensure continued reliability of the minimum quantity of potable water delivered, augment inadequate water supply system pressure to prevent loss of system integrity and to maintain adequate fire protection flows and replace or rehabilitate water supply wells that have exceeded their useful life. Each of the six projects is in the SMCSD capital replacement and rehabilitation program and have various degrees of completed efforts as described below.

Task 1. Administration

The County has performed a variety of administrative tasks to manage the scope, schedule and budget of the San Miguel Project and to communicate its progress to the involved stakeholders and agencies involved in project delivery. Specifically, the County has performed the following administrative work efforts:

- <u>Project Management:</u> Project scope creation, cost estimating and tracking, schedule preparation and tracking, budgeting and financing, and coordination and review of all completed project tasks.
- <u>Communication:</u> Communication, meetings and reporting to coordinate and provide updates to the County Board of Supervisors, San Miguel CSD, DWR and other involved parties.

Deliverables:

None

San Miguel Community Services District Critical Water System Improvements, Continued

Task 5. Land Purchase / Easement

While land acquisition (expansion of current private property easement) may be required for the San Lawrence Terrace (SLT) New Water Storage Tank, no land or easements have been acquired.

Deliverables:

None

Task 6. Assessment and Evaluation

The District completed a water master plan in 2002²⁵, and has provided on-going water system assessments and evaluations through the course of day-to-day operations of their water system over the years. Appendix A is an electronic copy of the 2002 water master plan, where some of the defined project elements have been studied and recommended. Water storage calculations and assessments were completed in 2002, and it was determined that the District was deficient in water storage.

Deliverables:

Description	Schedule
2002 Water Master Plan	March 2002

Task 7. Final Design

The District's Water System Improvements Project includes several "sub-projects" with a common goal of improving water supply reliability, addressing water quality issues, and improving fire safety. One of the sub- projects, fire hydrant replacements, requires no design and the labor will be conducted in-house through use of maintenance and operations staff. Below are individual tables for each sub-project and its current status amongst all tasks.

Sub-Project: Well 3 Rehabilitation	In Progress	Complete by October 2013	Funding Requested
Task 1: Administration	Yes	No	Yes
Task 5: Land Purchase/Easement	Not Required	NA	No
Task 6, 7, 8, 9: Planning, Design, Engineering,	No	No	Yes
Permitting Environmental Documentation			
(Completed by October 2013)			
Task 11: Construction	No	No	Yes
Sub-Project: Emergency Backup Power			
Task 1: Administration	No	No	No
Task 5: Land Purchase/Easement	Not Required	NA	No
Task 6, 7, 8, 9: Planning, Design, Engineering,	No	Yes	Yes
Permitting Environmental Documentation			
(Completed by October 2013)			
Task 11: Construction	No	No	Yes
Sub-Project: New Fire Hydrant and Wharf Head Replacements			
Task 1: Administration	Yes	Yes	No
Task 5: Land Purchase/Easement	Not Required	NA	No

²⁵ John L. Wallace and Associates. "Water Master Plan for San Miguel Community Services District." 2002.

San Miguel Community Services District Critical Water System Improvements, Continued

Sub-Project: Well 3 Rehabilitation	In Progress	Complete by October 2013	Funding Requested
Task 6, 7, 8, 9: Planning, Design, Engineering, Permitting Environmental Documentation (Completed by October 2013)	No	Yes	Yes
Task 11: Construction	No	Yes	Yes
Sub-Project: New Water Well Siting Study			
Task 1: Administration	No	No	Yes
Task 5: Land Purchase/Easement	No	No	Yes
Task 6, 7, 8, 9: Planning, Design, Engineering, Permitting Environmental Documentation (Completed by October 2013)	No	No	Yes
Task 11: Construction	No	No	Yes
Sub-Project: 12th and K Street Water Main Upgrades			
Task 1: Administration	Yes	No	Yes
Task 5: Land Purchase/Easement	Not Required	NA	No
Task 6, 7, 8, 9: Planning, Design, Engineering, Permitting Environmental Documentation (Completed by October 2013)	No	No	Yes
Task 11: Construction	No	No	Yes
Subproject – San Lawrence Terrace (SLT) Water Storage Tank			
Task 1: Administration	Yes	No	Yes
Task 5: Land Purchase/Easement	No	No	Yes
Task 6, 7, 8, 9: Planning, Design, Engineering, Permitting Environmental Documentation (Completed by October 2013)	No	No	Yes
Task 11: Construction	No	No	Yes

Deliverables:

None

Task 8. Environmental Documentation

The various sub-projects will require varying degrees of environmental evaluation, from none required, to some degree of evaluation. The fire hydrant replacement project will be the first sub-project to be completed and it will not require any environmental documentation. Other sub-projects for which environmental review is required, will be commenced immediately following award of funding for this Project. The District, with limited resources, will not be able to proceed with this Project until such time funding has been secured and confirmed. All required environmental documentation is described in the work plan.

Deliverables:

None

San Miguel Community Services District Critical Water System Improvements, Continued

Task 9. Permitting

See Task 7 tables for status of permitting for each sub-project.

Deliverables:

None

Task 11. Construction

See Task 7 tables for status of construction for each sub-project.

Deliverables:

None

5.5 EXISTING STUDIES

The purpose of this section is to provide any additional information not already presented above that is supportive of the project specific work plans which immediately follow this section. Information related to the names of project reports and studies, project maps, and project phasing are provided, if relevant to the project understanding.

5.5.1 City of Paso Robles Nacimiento Water Treatment Plant

Existing Data and Studies

- City of Paso Robles 2.0-MGD Nacimiento WTP Feasibility Study²¹, (AECOM, August 2011)
- A feasibility study to construct a 2 mgd WTP within a \$10M budget; includes an alternatives analysis for the selection of a recommended treatment process train and site layout.
- Water Rate Study²⁶
- City of Paso Robles Urban Water Management Plan
- Final Initial Study / Mitigated Negative Declaration²⁰
- Nacimiento Water Project EIR¹⁹

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²⁶ Kennedy/Jenks Consultants. 'City of Paso Robles 2010 Uniform Water Rate Study Final Report." 2010.

5.5.2 Attiyeh Ranch Conservation Easement

Existing Data and Studies

The conservation easement will prevent the conversion of rangeland to nonagricultural uses; and is made pursuant to the State of California's Rangeland, Grazing Land and Grassland Protection Act of 2002. The purpose of the Act is to protect California's rangeland, grazing land and grasslands through the use of conservation easements for continued wildlife, water quality, watershed and open-space benefits, which accrue to the State of California from livestock grazing. The Wildlife Conservation Board (WCB) is the lead agency designated for carrying out this Act.

The San Luis Obispo County General Plan, through its Agricultural Element²⁷ (revised May 2010) and Conservation and Open Space Element²⁸ (2010), includes the following goals and policies to protect open space (OS), bio resource (BR), and agricultural resources (AGP):

- AGP 24: Conversion of Agricultural Land "Discourage the conversion of agricultural lands to non-agricultural uses..."
- AGP 30: Scenic Resources "Balance the protection of the scenic resources with the protection of agricultural resources and facilities."
- Policy OS 1.7: Open Space Resource Protection "Protect open space resources by guiding development away from rural areas to more suitable areas."
- Policy OS 3.2: Conservation and Protection by Private Landowners "Encourage and provide voluntary incentives to private landowners to protect and maintain open space resources on their properties, for example, through the use of conservation easements and voluntary programs...".
- Policy BR 1.16: Land Acquisition "Encourage the use of voluntary conservation easements."
- Policy BR 3.3: Oak Woodland Preservation "Maintain and improve oak woodland habitat to provide for slope stabilization, soil protection, species diversity, and wildlife habitat."

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²⁷ County of San Luis Obispo. "Agriculture Element." 2010.

²⁸ County of San Luis Obispo. "Conservation and Open Space Element." 2010.

The Attiyeh Ranch is located directly adjacent to the Nacimiento Reservoir with approximately six (6) miles of Nacimiento River within the ranch. The ranch is undeveloped with the exception of three barns, five ranch houses, and a few additional sheds and miscellaneous ranch structures. Of these structures only three are occupied. The only other notable ranch infrastructure includes roads, most of which are unpaved ranch roads that lead to the existing structures and meander through the property to support ranching activities.

Following the recordation of the conservation easement, The Land Conservancy will monitor the Attiyeh Ranch once annually in accordance to The Land Conservancy's Easement Monitoring Procedures²⁹. Monitoring will occur either by vehicle or plane and photographs will be taken at photo monitoring point locations established for the Baseline Conditions Report³⁰ developed immediately preceding the recordation of the conservation easement figure below (**Figure 5-1**). Modifications to these points may be made during the Baseline Conditions Report site visit, which will occur near the project's completion. The purpose of the monitoring is to determine whether the terms of the conservation easement are being upheld. Monitoring by vehicle will occur approximately every year with the exception of every fifth year when aerial monitoring will occur instead.

March 2013 5-18

²⁹ The Land Conservancy of San Luis Obispo. "Conservation Easement Monitoring Policy." 2010.

³⁰ The Land Conservancy of San Luis Obispo County. "Baseline Conditions Report Policy." 2010.

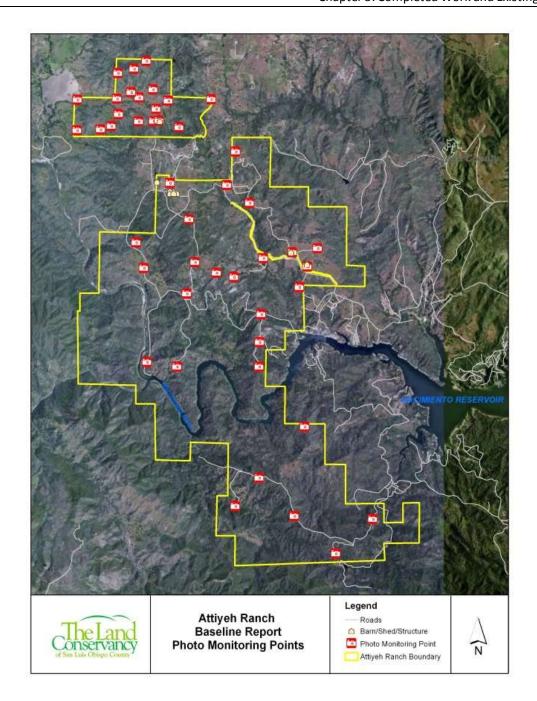


Figure 5-1. Attiyeh Ranch Conservation Easement photo monitoring locations.

5.5.3 Livestock & Land Program

Existing Data and Studies

The problems of nitrate, sediment and pathogen pollution from livestock facilities are identified in numerous plans at the regional level including: Central Coast Regional Water Quality Control Board Basin Plan³¹, California's Nonpoint Source Pollution Control Program³², Agricultural nonpoint source water pollution policy: The case of California's Central Coast³³ (November, 2008), Agricultural Management Measures³⁴ (January 2000) and Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters³⁴ (January 1993).

In San Luis Obispo County, the sediment, nutrient and pathogen pollution from livestock facilities have been noted in the following plans: Morro Bay Comprehensive Conservation and Management Plan, Action Plans, Agriculture and Grazing³⁵ (2012-draft); Pismo Creek Watershed Management Plan, Recommendations³⁵ (2009); Grazing Lands Management Plans for Monterey County Water Resources Agency land within the Nacimiento and San Antonio River Watersheds³⁶ (2008); Salinas River Watershed Action Plan³⁷ (2004); Santa Rosa Creek Watershed Management Plan³⁸ (2012); Paso Robles Basin Groundwater Management Plan⁵ (2011).

The County Master Water Report³⁹ (MWR, 2012) was developed to summarize County water conditions, including; cyclical droughts, declining groundwater levels, degradation of groundwater quality, and the limited availability of surface water supplies. The MWR details the importance for all entities in San Luis Obispo County to effectively manage available water resources to protect public health and safety, maintain viable ecosystems, avoid seawater intrusion, and allow for sustainable agriculture.

The MWR estimates that agriculture accounts for nearly 80 percent of the total County's current water demand. Since agricultural water predominately comes from groundwater sources, and is generally not provided – or metered – by a water supply system, innovative conservation

³¹ Regional Water Quality Control Board, Central Coast Region State Water Resources Control Board, and California Environmental Protection Agency. "Water Quality Control Plan for the Central Coast Basin." 2011.

³² State Water Resources Control Board California Coastal Commission. "Nonpoint Source Program Strategy and Implementation Plan, 1998-2013 (PROSIP)." 2000.

³³ Agriculture, Ecosystems, and Environment 128. "Agricultural Nonpoint Source Water Pollution Policy: The Case of California's Central Coast." 2008.

³⁴ United States Environmental Protection Agency. "Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters." 1993.

³⁵ Morro Bay National Estuary Program. "Comprehensive Conservation and Management Plan for the Morro Bay Estuary." 2012.

³⁶ Nacitone Watersheds Steering Committee and Central Coast Salmon Enhancement, Inc. "San Antonio and Nacimiento Rivers Watershed Management Plan." 2008.

Central Coast Regional Water Quality Control Board. "Salinas River Watershed Management Action Plan." 1999.
 Stillwater Sciences, Central Coast Salmon Enhancement, and Greenspace – The Cambria Land Trust. "Santa Rosa Creek Watershed Management Plan." 2012.

Creek Watershed Management Plan." 2012.

39 San Luis Obispo County Flood Control and Water Conservation District. "San Luis Obispo County Master Water Report." 2012.

programs and strategies are being sought to lessen overdraft potential on stressed basins.

Paso Robles Groundwater Management Plan, 2011⁵ states that many regions of San Luis Obispo County are realizing level three severities –declining water supply level that has reached or declined beyond its safe yield. These groundwater basins include all three sub-regions (South County, North County and North Coast) and include:

- Cuyama Valley
- Los-Osos
- Morro-Chorro
- North Coast
- Paso Robles/Atascadero
- Nipomo Mesa

5.5.4 Shandon State Water Turn-out

Existing Data and Studies

The Paso Robles Groundwater Basin Management Plan⁵ was completed and the Paso Basin was officially certified as a Level of Severity III water supply in 2011. As part of the Basin study, obtaining State Water from the Coastal Branch of the State Water Project via the Shandon State Water Turnout Project was selected as the preferred alternative because of its overall rankings in water supply reliability, project cost, water quality, engineering constraints and environmental impacts. Additional information on the alternatives evaluation can be found in the attached 1992 EIR and 2012 Addendum.

5.5.5 San Miguel Community Services District Critical Water System Improvements

Existing Data and Studies

The majority of the water system sub-projects were identified in the 2002 Water Master Plan⁴⁰ (WMP) prepared for San Miguel Community Services District (CSD). As indicated earlier, some of the sub-projects have arisen out of day-to-day operations and further deterioration of the San Miguel CSD's water system features over the past decade. The following summarizes the source(s) of information and past documents that define the San Miguel CSD's Project:

- Well 3 Rehabilitation. Not identified at the time of the 2002 WMP. At the time of the 2002 water master plan, the well 3 facilities were slightly less than 40 years old, and still functioning. Over the past decade, further deterioration of the well facilities has occurred as the old well facilities approach 50 years of age, particularly the well building that houses the chemical feed and electrical systems.
- Emergency Backup Power. Not identified at the time of the 2002 water master plan. At the time of the 2002 WMP, both wells were operating reliably and had little incidence of down time. It was envisioned that with fully implementing the water storage recommendations (See Table 11, Page 24, Project 3 and 6B, of the San Miguel CSD WMP Report) that water supply reliability during power disruption would be sufficient with storage alone. In 2008, the Well 3 pump failed and the well was out of service for an extended period of time. The 3rd well (SLT well) recently constructed, was struggling with water quality violations of the maximum contaminant level for arsenic and operations had been suspended, and the District was faced with a single well (Well 4) supplying the entire town with water. After facing that situation, the District realized that emergency backup power is essential to the two existing main well sites, to ensure continued supply of water to the town during power outages. With little resources to construct new wells with emergency backup power, the District modified their Project to address standby power at their existing well sites. To complicate the matter, the District's original plan to build 1.6 million gallons of water storage (see Table 11, Page 24 of the SMCSD WMP, Project 3) was reduced to 0.65 million gallons due to shortfalls in funding.
- New Fire Hydrants and Wharf Head Replacements. Refer to Table 11, Page 24 of the San Miguel CSD WMP, Project 18. Since the adoption of the 2002 WMP, additional fire hydrants and wharf head hydrants have deteriorated to the point of needing replacement, and thus the project now includes 13 new fire hydrants throughout the service area.
- New Water Well Siting Study. Refer to Table 11, Page 24 of the San Miguel CSD WMP, Project 6A.
- 12th and K Street Water Main Upgrades. Refer to Table 11, Page 24 of the San Miguel CSD WMP, Project 1. When the District constructed the new 0.65 million gallon water tank in 2010, the plan at that time included implementation of Project 1 identified in this WMP. However, with funding limitations, the 13th Street water main upgrade to 8" PVC pipe was deferred. After reassessing the current water system needs for fire flow and delivery pressure enhancement, this Project was modified to build a new water main in 12th Street to improve water system looping, thus achieving the same results as the original 13th Street water main replacement project.
- New Water Storage Tank. Refer to Table 11, Page 24 of the San Miguel CSD WMP, Project 5. At the time the water master plan was adopted in 2002, it was envisioned that 1.62 million gallons of water storage would be constructed in the Main Zone in the near future. However, only 0.65 MG of storage was constructed, with a footprint left to build a "sister" 0.65 MG tank in the future. This will bring the District's storage to 1.3 MG at some time; however, the District is in need of 1.6 MG of storage ultimately, and thus it was felt that upsizing and replacing the old 50,000 gallon SLT water tank, would be prudent, and the size should be increased from 100,000 gallons to 250,000 gallons (0.25 MG) thus bringing the District's overall water storage closer to the needed 1.6 MG.

5.5.6 San Simeon Supplemental Water Feasibility Study and Design Project

The majority of the water system deficiencies were identified in the 2007 water system master plan prepared for SSCSD. As indicated earlier, required project definitions have arisen out of day-to-day operations and further deterioration of the SSCSD's water system capacity and performance over the past three decades. The following summarizes the source(s) of information and past documents that may be utilized in development of the feasibility study:

- San Simeon CSD Water System Master Plan and Wastewater Collection System Evaluation, (Boyle, November 2007): A water and wastewater infrastructure plan to accommodate planned growth at the request of the San Luis Obispo County Planning Commission to assist in their completion of the Community Plan Update for Cambria and San Simeon.
- San Simeon Water Production Well Evaluation, (Boyle, October 2006): An evaluation of the condition, capacity and safe yield of the SSCSD groundwater wells and recommend measures to increase SSCSD's water supply using the two existing wells.
- San Simeon CSD Title 22 Engineering Report (No. 4090014), (Phoenix Civil Engineering, September 2011): A report submitted to the Central Coast Regional Water Quality Control Board Region 3 for the operation of a recycled water treatment to deliver recycled water through a piped network for outdoor irrigation.

Chapter 6. PROJECT WORK PLANS

The below section details the specific activities that will be performed to implement the proposal and deliver the benefits claimed. The task descriptions are presented in a format that will allow it to be used as the scope of work in the grant agreement if the proposal is selected for funding. The task detail is sufficient to demonstrate a high expectation of successful implementation. Additionally, the tasks provide sufficient detail to justify that the projects' cost estimates are consistent with those used in Attachment 4, Budget, and Attachment 5, Schedule. The work completed to date or expected to be completed by October 1, 2013 was discussed in the introduction section under "Completed Work" above. This section addresses the items which will be implemented after October 1, 2013.

Lake Nacimiento Water Treatment Plant

Proposed Work

The City of Paso Robles is located in northern San Luis Obispo County (North County), on the eastern, inland side of the Santa Lucia Mountains. Paso Robles is situated on the upper Salinas River, which flows north toward Monterey County. Incorporated in 1889, the City of El Paso de Robles (Paso Robles) now encompasses a total area of 11,985 acres on both sides of the Salinas River⁴⁰ (Rincon, 2003). The City also is situated on the western margin of the Paso Robles Groundwater Basin, which is the water-bearing portion of the upper Salinas River drainage area.

The City of Paso Robles currently relies on water from two sources: Salinas River underflow wells and groundwater from the deeper formation of the Paso Robles Groundwater Basin. Significant groundwater level declines in City wells and other basin wells have been occurring since the 1990's. San Luis Obispo County has designated the basin as a Level of Severity III, indicating the demand for water will equal or exceed its supply before supplemental supplies can be developed. In order to provide additional potable water for the City of Paso Robles, the Lake Nacimiento Water Treatment Plant project is proposed to reduce groundwater pumping within the overdrafted Paso Robles Groundwater Basin.

The City of Paso Robles is the lead agency for the completion of the Lake Nacimiento Water Treatment Plant Project. Through use of local match dollars, planning, environmental and design studies have been completed to position the City for immediate implementation of the construction bid and award process upon award of the grant funding in October 2013. The efforts below support the project specific work plan tasks to achieve project completion by November 2014.

Project Administration (Task 1) - Budget Category (a)

The City of Paso Robles (City) is the lead agency for the completion of the Lake Nacimiento Water Treatment Plant Project (Project). Project Administration is an on-going task. Project status updates are prepared on a quarterly basis in response to the various stakeholders and their meeting schedules. As milestones are met, the project manager will document and notify sponsoring agencies and project stakeholders.

The purpose of this task is to keep the project budget and schedule on track, communicate project progress and execute and manage all consultant contracts. As the lead agency for implementation of the Project, the City has and will continue to be responsible for the daily

 $^{^{\}rm 40}$ Rincon Consultants, Inc. "City of El Paso de Robles General Plan 2003." 2003.

http://www.prcity.com/government/departments/commdev/planning/general-plan-final.asp

management of the Project. The baseline schedule and schedule updates will be prepared and reported to the City on a monthly basis by the construction manager. The City will then provide quarterly updates to San Luis Obispo County Public Works (County) and Department of Water Resources (DWR).

Grant funding is **not** being requested for this work.

Deliverables:

Description	Schedule
Project Baseline Schedule and Updates	Quarterly during construction
Project Budget and Updates	Quarterly during construction
City MOU with County of San Luis Obispo	November 2013

Labor Compliance Program (Task 2)

The City of Paso Robles has an existing Labor Compliance Program consistent with subdivision (b) of Labor Code Section 1771.5. This task involves the work needed to demonstrate compliance with state labor laws. The City will ensure compliance with state labor codes in three ways:

- Submittal of a letter to the State with associated exhibits documenting compliance with relevant Labor Code requirements;
- The construction contract special provisions will state that adherence to Caltrans State Standard Specifications is required. Section 7 of the State Standard Specifications addresses the requirements of the State labor code for Public Works projects.
- Construction Manager review of the contractor's payroll submittals for labor compliance as required in the State Standard Specifications.

Grant funding is **not** being requested for this work. No work on this task will occur until award of grant funding for the project.

Deliverables:

Description	Schedule
Labor Compliance Documentation	November 2013

Reporting (Task 3)

In support of the IRWM Implementation Grant administration, quarterly project reports will be provided to the County by the City that describes the progress and accomplishments for the quarter and is in accordance with the Project Performance Monitoring Plan. A letter of intent to enter into an MOU with the County that is in accordance with the grant agreement was signed on March 13, 2013. An assessment of the project schedule and budget, and updated schedules and budgets, if appropriate, will also be included. Following project close-out, the City will prepare

a Final Project Completion Report summarizing the project implementation, demonstrating completion of all task items, and documenting the project costs and grant distributions. The Final Report will be submitted within 90 days of project completion (including environmental mitigation and compliance work). The quarterly reports and final reports shall be prepared consistent with State grant guidelines.

Grant funding is not being requested for this work. No work on this task will occur until award of grant funding for this project.

Deliverables:

Description	Schedule
Quarterly invoices and reports	Quarterly during construction
Final Project Completion Report	March 2015
Post Completion Report	March 2016

Project Performance Monitoring Plan (Task 4)

This task includes all activities necessary to develop the Project Performance Monitoring Plan, implement the plan, and manage and share the data collected during the monitoring as described in Attachment 6 Monitoring, Assessment, and Performance Measures.

1.0.1 Preparation of Monitoring Plan (Task 4.1)

The Project Performance and Monitoring Plan (PPMP) will be prepared at the start of the City of Paso Robles/Lake Nacimiento Water Treatment Plant project implementation and will outline how the project performance will be assessed and evaluated. The PPMP will lay out an evaluation and assessment process based on the City of Paso Robles objectives and the San Luis Obispo Regional Integrated Proposal goals and outcomes. The PPMP will present the planned project monitoring, assessment and performance measures that will demonstrate that the project will meet its intended goals, achieve measureable outcomes and provide value to the State of California.

The PPMP will include the following items:

- City of Paso Robles / Lake Nacimiento Water Treatment Plant project goal;
- Desired outcome of the project;
- Output indicators measures to evaluate change that is the direct result of the project;
- Measurement tools and methods: CCWA will be responsible to monitor and measure the metered flows delivered to Shandon through the turnout facility; and
- Targets measureable targets that are feasible to meet during the life of the project

The PPMP will define the parameters and process for measuring output and outcome indicators to demonstrate progress towards the project goal. The completed project will be evaluated against the following goal to determine the project's performance.

- Goal #1 To provide up to 2.4 million gallons per day (mgd) of additional treated Lake Nacimiento water supply for potable use within the City of Paso Robles during peak summer water demand.
- Goal #2 To deliver better quality, lower TDS water to the City of Paso Robles.
- Goal #3 To off-set City groundwater extractions from the Paso Robles Groundwater Basin using treated Lake Nacimiento water supplies and increase groundwater elevations in the Paso basin.

1.0.2 Monitoring Activities (Task 4.2)

For Goal #1, the project will be measured by operating the plant at an average daily level of at least 90% of design capacity (2.16 MGD) or greater, during the peak summer demand months of June through September, when the plant is anticipated to operate. The treated water production will be measured by flow meters at the water treatment plant. The reports that will be provided to monitor performance include the annual reports that are now provided to DWR and the County of San Luis Obispo pursuant to the state water code. These reports provide monthly water production volume by production source.

As defined in the PPMP, the District will monitor water system performance, water quality and groundwater elevations using electronic metering and sensor devices located throughout the water treatment plant and water distribution system:

Flow Testing continuousWater Quality Testing xx frequency

Groundwater Elevation Monitoring xx frequency

1.0.3 Data Management and Sharing (Task 4.3)

As defined in the PPMP, the District will manage the data in a Microsoft Excel Format and provide annual reporting to the County.

Grant funding is **not** being requested for this task.

Deliverables:

Description	Schedule
Project Performance Monitoring Plan	January 2014
Data Management Tool	March 2015
Annual Reporting to County	March 2016

Land Purchase / Easement (Task 5) - Budget Category (b)

There is no land purchase or easement required to complete the study. The water treatment plant will be constructed on a 21-acre site the City of Paso Robles has owned for many years (see site map). The plant site has been operated as a well-field since 1975 and has four Salinas River underflow wells in place. The Paso Robles Nacimiento Water Project water delivery turnout is also located on the plant site. No land acquisitions are needed to complete the project. A water

line crossing agreement (easement) with the Union Pacific Railroad will be acquired prior to construction for a treated water main that will be constructed as part of the project.

Deliverables:

Description	Schedule
Water Line Crossing Agreement (Easement) with	December 2013
Union Pacific Railroad	

Assessment and Evaluation (Task 6) - Budget Category (c)

No additional planning reports or technical memos need to be completed prior to project implementation.

Deliverables:

None

Final Design (Task 7)

The Phase 1 Nacimiento water treatment plant will have a capacity of 2.4 million gallons per day (mgd). The treatment technologies and methods to be employed include: 1) dissolved air floatation pretreatment for Total Organic Carbon (TOC) removal, 2) microfiltration membrane filtration, 3) granular activated carbon for post filtration treatment for Disinfection Byproduct (DBP) control. The major facilities and components to be constructed as part of the project include:

- Dissolved air flotation (DAF) facilities
- DAF residuals buffering tank/basin
- Membrane filtration building and facilities
- Membrane concentrate neutralization system
- Granular activated carbon filtration facilities
- Treated water (clearwell) storage tank
- High service finished water booster pumping station

Additional information on project design standards and individual plant components is available in the following design document: City of Paso Robles 2.0 MGD Nacimiento WTP Feasibility Study²¹ (August, 2011, AECOM Engineers). Please note that the capacity of the plant was increased to 2.4 MGD but other aspects of the plant design standards described in this document remain in effect.

The final design is in progress and is scheduled to be completed in August, 2013. Construction bidding documents will be prepared as part of the final design work. Copies of the 30% Design Plans and Specifications⁴¹ are included in Exhibit A.

Deliverables:

Description	Schedule
30% Design	
60% Design	
90% Design	

Environmental Documentation (Task 8)

The County's existing allocation of Lake Nacimiento water was identified in the Paso Robles Urban Water Management Plan as the most feasible and cost-effective supply alternative. A comprehensive water supply alternatives evaluation was done as part of the EIR for the Nacimiento Water Project¹⁹.

The Nacimiento Water Project was selected because of its high rankings with regard to anticipated water yield, water supply reliability, estimated cost, and environmental and regulatory permitting requirements. Additional information on the alternatives evaluation can be found in the Nacimiento Project EIR.

A study was conducted in 2008 to examine potential environmental and other impacts of the water treatment plant project. The Initial Study/Mitigated Negative Declaration Paso Robles Water Treatment Plant and Main East Pipeline Project is available on-line²⁰.

Based on the factual presentation of the AECOM Feasibility Study alternatives analysis, the recommended alternative will be required to gain CEQA compliance by the City. The key elements of the CEQA analysis include:

- 1. Project Description
- 2. Environmental Analysis
- 3. Local Stream Fisheries
- 4. Groundwater Resources
- 5. Growth Inducement Potential and Secondary Effects of Growth
- 6. Alternatives Analysis
- 7. Other CEQA Issues (e.g., Cumulative Impacts, Unavoidable Adverse Impacts, etc.)

⁴¹ City of El Paso del Robles and AECOM. "Plans for Construction of 2.4 MGD Water Treatment Plant Project." 2012.

Deliverables:

Description	Schedule
Draft Program EIR	September 2014
Final Program EIR	December 2014

Permitting (Task 9)

The City of Paso Robles will issue a Conditional Use Permit (if necessary), and grading/building permits for the project prior to construction. No additional environmental permits are required to implement the project because the 2.4 mgd capacity treatment plant project will not require the construction of a new water line crossing of the Salinas River corridor, or additional back-up electrical generators.

Grant funding is being requested for this task.

Deliverables:

Description	Schedule
City of Paso Robles Conditional Use Permit	November 2013
City of Paso Robles Grading and Building Permits	June 2013

Construction Contracting (Task 10) - Budget Category (d)

This task includes the work to prepare bid packages for distribution to interested bidders, advertise the project, conduct a pre-bid meeting, review, prepare and respond to bidder's requests for information, evaluate bids and award the construction contract for the project. This task will be completed using City of Paso Robles Public Works staff.

Grant funding is **not** being requested for this task. No work has or will be started until grant funding award.

Deliverables:

Description	Schedule
Advertise bid documents	August, 2013
Hold Pre-bid conference	August, 2013
Close of bidding period and opening of bids	October, 2013
Complete evaluation of bids	October, 2013
Award of construction contract by City Council action	November, 2013
Issue Notice-to-Proceed	November, 2013

Construction (Task 11)

As schematically outlined in the City's environmental document for the project, construction of the WTP will involve mobilization, site grading, installation of pipelines and utilities, building construction, water tank construction, installation of equipment and electrical and mechanical systems, and startup and testing. Construction of the WTP facilities will take place at the existing Thunderbird Well field site. Access to the site will be via the City's existing access road from Ramada Drive. Principal deliveries to the site will include imported earthwork materials, building and roofing materials, process and building equipment, chemical storage tanks, and associated piping and fittings.

Initial construction activities will involve grading of the site to match building foundation levels. This will be followed by installation of the underground pipelines and buried utilities. With the initial site work completed, building foundations will be placed followed by building wall and roof construction.

The treated water reservoir will be built at the north end of the site. This will involve placement of concrete slabs, walls and roof, and pre-stressing the walls with a wire wrap. At completion of the building shells, the process equipment will be installed and the building systems completed and contractor equipment demobilized. Once all facilities are constructed, a systematic process of testing each system and subsystem will be performed. This process testing will be followed by startup of the plant and production of treated water.

Grant funding is being requested for this task. No work has or will be started until grant funding award.

Deliverables:

Description	Schedule
Project Construction	November 2013 to November 2014
Construction Reporting and Documentation	Refer to Task 3

Environmental Compliance / Mitigation / Enhancement (Task 12) - Budget Category (e)

There are is no known required environmental mitigation (ie. revegetation after construction). All work will be done within the existing City of Paso Robles water treatment plant/well-field property, City of Paso Robles road right-of-way, or Union Pacific Railroad right-of-way.

No grant funding is **not** being requested for this task.

Deliverables:

None

Construction Administration (Task 13) - Budget Category (f)

Construction Management will occur in varying levels and degrees for the duration of the construction period. The City Engineer will be responsible for development, negotiation and securing all contracts, including construction contractors and managers. There are two main components of this task, including:

1.0.4 Construction Management

The City will provide construction manager(s) and will be responsible for:

- Providing assistance during the bid period;
- o Provide on-site representation for the District;
- o Perform quality assurance and control practices on the work performed; and
- Analyze and provide recommendations on contractor claims.
- Maintain construction contract budget, approve contractor pay requests, construction documentation.
- Oversees environmental mitigation implementation.

1.0.5 Engineering Services During Construction (ESDC)

Engineering services will be contracted with the City Engineer. The engineer will be responsible for:

- o Performing submittal review;
- o Responding to contractor requests for information;
- Issuing clarifications;
- o Recommending change orders to the owner; and
- o Creating as-built records for the project based on construction documentation.

The Construction Manager will also be responsible for reviewing the contractor's payroll submittals for labor compliance as required in the State Standard Specifications and Labor Compliance Program.

Grant funding is being requested for this task. No work has or will be started until grant funding award.

Deliverables:

Description	Schedule
Monthly Construction Progress Reports	Ongoing
ESDC Documentation	Ongoing
Notice of Completion	November 2014
Record Drawings	December 2014

Attiyeh Ranch Conservation Easement

Proposed Work

The purpose of the Attiyeh Ranch conservation easement is to preserve the Attiyeh Ranch and prevent the conversion of rangeland, grazing land and grassland to nonagricultural uses; to protect the long-term sustainability of livestock grazing and the benefits that occur from livestock grazing; to preserve the natural ecosystem that exists today for environmental and social benefits; and to ensure continued wildlife, water quality, watershed and open-space benefits from livestock grazing on the 8,300 acre ranch. It is further the purpose of the conservation easement to ensure the Attiyeh Ranch will be retained forever in its agricultural and natural condition and to prevent uses within the ranch that will significantly impair or interfere with the open space, agricultural, and natural habitat values of the ranch. The conservation easement will confine the use of the ranch to such activities, including, without limitation, those involving livestock grazing, habitat protection, education and other compatible uses.

As a passive ecosystem preservation project, the process for implementation of the project goals differs significantly from other more active water resource management projects such as drainage and water supply infrastructure projects. For the Attiyeh Project, the standard tasks associated with constructing a project (e.g., construction management, bid proposals, and scheduling) are not well-suited to the types of activities needed for implementation; however, it is still the intent that this work plan adhere to the organization of the active project model for ease in locating and comparing information between projects within the implementation grant proposal.

Project Administration (Task 1) - Budget Category (a)

The Land Conservancy is the lead agency for the completion of the Attiyeh Ranch Conservation Easement project. The purpose of this task is to keep the project budget and schedule on track, communicate project progress and execute and manage all consultant contracts. As the lead agency for implementation of the Project, The Land Conservancy has and will continue to be responsible for the daily management of the Project. Work under this task includes preparation of grant invoices and project agreements associated with project implementation. A letter of intent to enter into a Funding Agreement with the District that is in accordance with the grant agreement is attached as **Exhibit B**.

The Project Administration task is an on-going task. Project status updates are prepared on a monthly basis in response to the various stakeholders and their meeting schedules. As milestones are met, the project manager documents and notifies sponsoring agencies and stakeholders.

All documentation produced as a result of the project, including the recorded conservation easement, signed baseline report, critical correspondence, contracts, reports, and monitoring records, will be triplicated according to The Land Conservancy's Records Policy with one copy saved electronically, one copy printed for office reference, and a third copy of original documents sent to an off-site storage facility for archiving. Copies of final documents will be reported to the Department of Water Resources during project updates.

Deliverables:

Description	Schedule
Grant Invoices	Quarterly
Documentation archival	Ongoing

Labor Compliance Program (Task 2)

There is no labor for the Attiyeh Project that would require preparation of a Labor Compliance Plan consistent with subdivision (b) of Labor Code Section 1771.5. This task involves the submittal of a letter documenting that.

Deliverables:

Description	Schedule
Letter documenting LCP does not apply	October 2013

Reporting (Task 3)

In support of the IRWM Implementation Grant administration, quarterly project reports will be provided to the County that describes the progress and accomplishments for the quarter. An assessment of the project schedule and budget, and updated schedules and budgets, if appropriate, will also be included. Following project close-out, The Land Conservancy will prepare a Final Project Completion Report summarizing the project implementation, demonstrating completion of all task items, and documenting the project costs and grant distributions. The Final Project Completion Report will be submitted within 90 days of project completion. The quarterly reports and final reports shall be prepared consistent with State grant guidelines.

A Post Completion Report will be prepared and submitted within ninety (90) calendar days after the first operational year of the project. The report will describe the project performance and performance monitoring results in accordance with the Project Performance Monitoring Plan. In subsequent years, the Post Completion Report will be prepared and submitted no later than March 15 of each year. The reporting will occur annually for a total of 10 years after the completed project begins operation.

Tribal notifications are required for all projects funded by Proposition 84. If awarded, all appropriate tribal notifications will be made.

Grant funding is not being requested for this task.

Deliverables:

Description	Schedule
Tribal Notification	October 2013
Quarterly Reports	Quarterly
Final Project Completion Report	November 2014
Post Completion Report	November 2015

Project Performance Monitoring Plan (Task 4)

This task includes all activities necessary to develop the Project Performance Monitoring Plan, implement the plan, and manage and share the data collected during the monitoring as described in Attachment 6 Monitoring, Assessment, and Performance Measures.

1.0.6 Develop Monitoring Plan (Task 4.1)

The Project Performance and Monitoring Plan (PPMP) will be prepared at the initiation of implementation to outline how the project performance will be assessed and evaluated. The PPMP will lay out an evaluation and assessment process based on the San Luis Obispo Regional Integrated Proposal goals and outcomes, and will incorporate The Land Conservancy Conservation Easement Monitoring Policy and Procedure²⁹ (Exhibit C).

The environmental stewardship benefits will be measured by monitoring the Attiyeh ranch conservation easement area to ensure the easement conditions are being followed, consistent with The Land Conservancy Conservation Easement Monitoring Policy and Procedure (Exhibit C). Upon the recordation of the Attiyeh Ranch conservation easement, The Land Conservancy will have a perpetual liability and responsibility to ensure the terms of the easement are upheld.

The community/social benefits will be measured by tracking and measuring recreational use of the property during the docent led hikes. Miles hiked, hike duration, and number of community members attending hikes will be tracked.

Grant funding is not being requested for this task.

The Land Conservancy will submit a copy of the established monitoring program. Additional detail regarding the established monitoring program can be found in Attachment 6 Monitoring, Assessment, and Performance Measures.

Deliverables:

Description	Schedule
Project Performance Monitoring Plan	November 2013

1.0.7 Monitoring Activities (Task 4.2)

As defined in the PPMP, The Land Conservancy will monitor the Attiyeh Ranch conservation easement area annually.

The environmental stewardship benefits will be measured by monitoring the Attiyeh ranch conservation easement area to ensure the easement conditions are being followed, consistent with The Land Conservancy Conservation Easement Monitoring Policy and Procedure.²⁹

Site monitoring activities include the following:

Pre-monitoring Activities

- Schedule site visit (at least annually)
- Review project information
- Load field bag with necessary equipment

Monitoring Activities

- Coordination with landowner
- Site visit and photography
- Completion of monitoring checklist

Post-monitoring Activities

- Complete and archive photographs, monitoring checklist, and monitoring map
- Mail post-monitoring letter to landowner
- Initiate The Land Conservancy's Enforcement of Easement Procedure (if potential easement violation exists)

The community/social benefits will be measured by tracking and measuring recreational use of the property during the docent led hikes. Miles hiked, hike duration, and number of community members attending hikes will be tracked.

A year after the recordation of the conservation easement, The Land Conservancy will contact the landowner to schedule a monitoring visit. Photographs at each monitoring location will be taken and a monitoring checklist that documents any easement violations will be completed. If any violations are observed, The Land Conservancy's Enforcement of Easement Procedure will be followed, which states a notice of violation will be sent with follow up actions described. To monitor the violation, follow up monitoring activities will be conducted based on the type of violation. Once the violation is resolved the landowner will be issued another letter acknowledging the resolution. All annual monitoring documentation will be completed under Task 4.3.

Upon the recordation of the Attiyeh Ranch conservation easement, The Land Conservancy will have a perpetual liability and responsibility to ensure the terms of the easement are upheld. Annual monitoring activities are paid for by a stewardship endowment managed by The Land Conservancy. The value of funds required to monitor the Attiyeh Ranch conservation easement was determined using The Land Conservancy's Conservation Easement Annual Stewardship Cost spreadsheet.

Deliverables:

Description	Schedule
Annual Monitoring Site Visit	August 2015
Annual Monitoring Checklist	August 2015
Enforcement Letter	As needed

1.0.8 Data Management and Sharing (Task 4.3)

Following the conservation easement annual monitoring site visit, The Land Conservancy will process the data including monitoring photographs and the monitoring checklist, into a monitoring report that will be sent to the landowner and any project partners requesting reports. The Department of Water Resources and the Wildlife Conservation Board are the project partners who would receive annual monitoring reports, if the project is funded. Annual monitoring reports include a letter from the Conservation Director acknowledging the results of the monitoring site visit and a completed monitoring checklist signed by both the Conservation Director and the Executive Director. All annual monitoring documentation will be archived electronically and all original documentation will be stored at an off-site location. Annual monitoring activities are paid for by a stewardship endowment managed by The Land Conservancy. The value of funds required to monitor the Attiyeh Ranch conservation easement was determined using The Land Conservancy's Conservation Easement Annual Stewardship Cost spreadsheet.

Deliverables:

Description	Schedule
Annual Monitoring Report and Letter	August 2015
Archival of Annual Monitoring Records	September 2015

Land Purchase / Easement (Task 5) - Budget Category (b)

A surveyor has been hired to determine the legal description of the easement area and any excepted areas as described in the completed work section of this Attachment. Excepted areas are areas on the ranch that are excluded from the terms of the conservation easement and typically include building envelopes and ranch headquarters. There are eight (8) anticipated excepted areas that total approximately 36 acres. The necessary legal descriptions and exhibits to record the conservation easement have been initiated and are mostly complete, however, some

revisions and updates are possible up to the date of recording the conservation easement. This task includes any work efforts needed to update and refine the completed legal descriptions and exhibits to record the conservation easement.

The additional work associated with purchasing the easement including work to secure the required additional funding, and complete an updated appraisal is included within the work items for Task 6 along with other activities that will be required prior to recordation of the easement.

Deliverables:

Description	Schedule
Legal Survey (Legal Descriptions / Easement Exhibit)	July 2014

Assessment and Evaluation (Task 6) - Budget Category (c)

Work under Task 6 will involve completing the necessary project assessments and evaluations to secure project funding as well as to record the final conservation easement. Work in this task will be performed by The Land Conservancy staff or by consultant as noted within the following description. No grant funding is being requested for this task.

The Land Conservancy is developing partnerships for cost sharing and filling the funding gap of approximately \$4M to complete and record the proposed conservation easement. The Land Conservancy staff will be working to secure funding through various State and Federal agencies, as well as notable non-profit organizations including the ones identified below:

- California Department of Fish and Wildlife
- Department of Defense
- The Nature Conservancy
- The Wyss Foundation

As these funding sources, and potentially others, are secured letters of funding commitment will be acquired and any funding requirements (such as plans or studies) will be incorporated into this work task.

The Land Conservancy staff will also work on developing the final conservation easement language, however, it is anticipated that project partners, may need to review and approve the final conservation easement language. Edits to the conservation easement could then be contingent on additional supporters; therefore a final conservation easement document will not be prepared until the project approaches completion.

Because the Attiyeh Ranch is located in northern San Luis Obispo County's Adelaida area, which has historic mineral development, a Mineral Remoteness Study may be required. If there is any severed mineral interest on the Attiyeh Ranch, which will be examined in the Preliminary Title Report, a Mineral Remoteness Report will be conducted by a licensed geologist to acknowledge mineral development potential on the ranch. The landowner is not interested in

developing the ranch for mineral resources and has agreed to clear any mineral issues off title, if necessary.

A contemporary appraisal was completed October 2013, and the conservation easement costs are not expected to change substantially in one year. However, as the project nears completion, The Land Conservancy staff will obtain an appraisal update or letter.to confirm/verify the contempory appraisal. An appraisal update will be completed just prior to recording the conservation easement to ensure the purchase price of the easement is accurate. Important to note, should the easement costs increase significantly, the landowner has agreed to a "bargain sale" of the easement to reduce project costs.

A site survey will be conducted by the Land Conservancy staff prior to the recordation of the conservation easement for the development of baseline documentation. Results are summarized in the Baseline Conditions Report³⁰ following The Land Conservancy's Baseline Documentation Policy and Procedure which is completed and signed immediately prior to the recordation of the conservation easement (Task 11). Vegetation and infrastructure are closely evaluated to describe the current conditions of the ranch. Photo monitoring points are established to evaluate changes on the ranch over time. Photographs are taken at these monitoring points once annually, in perpetuity, as part of the stewardship responsibilities of Land Conservancy and as described in Task 4.2.

Deliverables:

Description	Schedule
Funding Commitment Letters	June 2014
Mineral Remoteness Report	January2014
Updated Appraisal	July 2014
Attiyeh Ranch Baseline Conditions Report Site Survey	July 2014
Final Conservation Easement Language	July 2014

Final Design (Task 7)

No engineering or design is required for this project.

Deliverables: None

Environmental Documentation (Task 8)

CEQA or other environmental documentation is not required for this project because state and federal law do not require this type of documentation for the recordation of a conservation easement. However, for easements which intend to qualify for federal tax benefits, the Internal Revenue Code §170(h) and U.S. Treasury Regulations §1.170A-14 must be met. If the

landowner chooses to pursue tax benefits for the Attiyeh Ranch conservation easement, it qualifies because the easement protects the following: land preserved for outdoor recreation by, or education of, the general public; relatively natural habitat of fish, wildlife, or plants or similar ecosystems; and open space for scenic enjoyment of the general public.

Deliverables: None

Permitting (Task 9)

There are no environmental and/or construction permits required to record the Attiyeh Ranch conservation easement.

Construction Contracting (Task 10) - Budget Category (d)

There is no construction contracting needed for the Attiveh Ranch conservation easement.

Below is the Attiyeh Project implementation tasks and deliverables effort to be conducted for the purchase and reporting of benefits under the grant proposal.

Construction (Task 11)

There is no construction required for the project, however, there are several implementation tasks required for final purchase of the easement. Once Tasks 5 and 6 have been completed, the conservation easement will be ready to record. Before the easement records, however, The Land Conservancy's Land Committee and Board of Trustees will review the final conservation easement language. The Board of Trustees must approve the Attiveh Ranch conservation easement project at a monthly Board Meeting and the Board President must sign a resolution accepting the conservation easement. The Attiveh Foundation must also formally approve the final conservation easement language before the easement records as well. Once both parties have agreed upon the terms of the easement, a final title report will be ordered by First American Title to ensure no new liens exist on the ranch and the funds will be transferred from The Land Conservancy's account to the escrow account established at the title company. Once funds have transferred The Land Conservancy and the Attiyeh family will meet at First American Title to sign the conservation easement and two copies of the Baseline Conditions Report³⁰. Next, the title company sends the conservation easement to the County of San Luis Obispo's Assessor's Office for recordation. The Land Conservancy and the Attiveh family each retain a copy of the signed Baseline Conditions Report for their records. Once the conservation easement is recorded The Land Conservancy will be sent the recorded copy of the recorded conservation easement stamped by the Assessor's Office. At this time, the title company will issue a copy of the title insurance to The Land Conservancy.

A year after the conservation easement is recorded, and each subsequent year, The Land Conservancy staff will visit the ranch to conduct its annual monitoring, as described in Task 4. Photographs will be taken at established photo monitoring point locations and a checklist will be completed. The monitoring photographs, checklist, and letter to the landowner will be organized into a stewardship packet archived at an offsite location. A letter will be sent to the Attiyeh family each year acknowledging the monitoring results. If any violations to the terms of the conservation easement are found, follow up actions will be initiated.

Deliverables:

Description	Schedule
Board Resolution to Accept Conservation Easement	July 2014
Attiyeh Foundation Letter Approving Conservation Easement	July 2014
Final Title Report	July 2014
Signed Baseline Conditions Report	August 2014
Recorded Attiyeh Ranch Conservation Easement	August 2014
Title Insurance	August 2014

Environmental Compliance / Mitigation / Enhancement (Task 12) - Budget Category (e)

There is no Environmental Compliance / Mitigation / Enhancement needed for the Attiyeh Ranch conservation easement.

Construction Administration (Task 13) - Budget Category (f)

There is no construction contracting needed for the Attiyeh Ranch conservation easement.

Livestock and Land Program

Proposed Work

The Livestock and Land Program will address natural resource concerns faced by livestock owners by providing education, technical assistance and cost share for implementation of management measures. Water quality improvements will be achieved by giving livestock owners the tools to complete water quality site assessments and to implement Best Management Practices (BMPs) near listed waterways. The behavioral and management practice changes achieved by this program will provide immediate and lasting water quality and watershed improvements by reducing the off-site mobilization of manure, urine and sediments from livestock facilities. The program will make significant progress toward watershed goals listed in TMDLs and watershed plans.

Project Administration (Task 1) - Budget Category (a)

The purpose of this task is to keep the project scope, budget and schedule on track, and to communicate project progress with sponsoring agencies, stakeholders, and the various organizations involved with project delivery. This task includes execution and management of all consultant and construction contracts (no contracts are already in place). The Coastal San Luis and Upper Salinas Las Tablas Resource Conservation Districts (Conservation Districts) have and will continue to be responsible for the daily management of the project under this task. Work under this task includes preparation of grant invoices and project agreements associated with project implementation.

The Project Administration task is an on-going task.

Grant funding is being requested for this work.

Deliverables:

Description	Schedule
Consultant/Construction Contracts	Within 1 Year of Contract Date
Landowner Agreements	5/1/2014-5/15/2015
Grant Quarterly Invoicing	Quarterly

Labor Compliance Program (Task 2)

Both Conservation Districts are in the process of applying for a Labor Compliance Program consistent with subdivision (b) of Labor Code Section 1771.5. This task involves the work needed to demonstrate compliance with state labor laws. the Conservation Districts work closely with a consultant, Contractor Compliance and Monitoring Inc., to implement the LCP. The Conservation Districts will ensure compliance with state labor codes in three ways:

- The Conservation Districts will submit to the State a letter with associated exhibits documenting compliance with relevant Labor Code requirements.
- Where applicable, the construction contract special provisions will state that adherence to NRCS Standard Specifications is required. Section 7 of the State Standard Specifications addresses the requirements of the State labor code for Public Works projects.
- Where applicable, the Construction Manager reviews the contractor's payroll submittals for labor compliance as required in the State Standard Specifications.

Grant funding is being requested for this work. No work on this task will occur until award of grant funding for the project.

Deliverables:

Description	Schedule
Labor Compliance Documentation	November 2013

Reporting (Task 3)

In support of the IRWM Implementation Grant Administration, quarterly project reports will be provided to the District that describes the progress and accomplishments for the quarter and is in accordance with the Project Performance Monitoring Plan as described in Task 4. An assessment of the project schedule and budget, and updated schedules and budgets, if appropriate, will also be included. Following project close-out, each Conservation District will prepare a Final Project Completion Report summarizing the project implementation, demonstrating completion of all task items, and documenting the project costs and grant distributions. The Final Report will be submitted within 90 days of project completion (including environmental mitigation and compliance work). The quarterly reports and final report shall be prepared consistent with State grant guidelines.

A Post Completion Report will be prepared and submitted within ninety (90) calendar days after the first operational year of the project. The report will describe the project performance and performance monitoring results in accordance with the Project Performance Monitoring Plan. In subsequent years, the Post Completion Report will be prepared and submitted no later than March 15 of each year. The reporting will occur annually for a total of 10 years after the completed project begins operation and show that desired outcomes were met.

Tribal notifications are required for all projects funded by Proposition 84. If awarded, all appropriate tribal notifications will be made by the Conservation Districts.

Grant funding is being requested for this task.

Deliverables:

Description	Schedule
Project Baseline Schedule	November 2013
Grant Quarterly Reporting	Quarterly
Final Project Completion Report	90 days After Project Completion
Post Completion Report	90 Days After 1 st Year (Annually for 10 years)

Project Performance Monitoring Plan (Task 4)

This task includes all activities necessary to develop the Project Performance Monitoring Plan, implement the plan, and manage and share the data collected during the monitoring as described in Attachment 6 Monitoring, Assessment, and Performance Measures.

1.0.9 Develop Monitoring Plan (Task 4.1)

The Project Performance and Monitoring Plan (PPMP) will be prepared at the initiation of project implementation to outline how the project performance will be assessed and evaluated (as described in Attachment 6 Monitoring, Assessment, and Performance Measures). The PPMP will lay out an evaluation and assessment process based on the San Luis Obispo Regional Integrated Water Management Proposal goals and outcomes.

There is one project goal that the completed project will be evaluated against to determine the projects performance.

• Goal #1 – Where BMPs are installed, reduce pollutant loading to surface waters by 30% from livestock facilities.

Performance will be measured through pollutant load modeling and landowner participation. More details of the proposed measurement tools and methods can be found in Attachment 6.

Grant funding is being requested for this task.

1.0.10 Monitoring Activities (Task 4.2)

Consistent with the PPMP, the Conservation Districts will monitor its progress through pollutant load modeling at implementation sites. Measurement will also be made through levels of horse owner participation to gage the public awareness and engagement in the Livestock and Land Program goals and implementation.

Pollutant Load Modeling
 Public Awareness Surveys
 Upon implementation project completion
 At workshops

1.0.11 Data Management and Sharing (Task 4.3)

Consistent with the PPMP, the Conservation Districts will manage the data used to develop the model (e.g. number of horses, acreage, distance to surface water, etc.) in a Microsoft Excel format and provide annual Post Completion Reports to the County. The Conservation Districts will also provide a one-time report to the U.C. Davis Natural Resource Project Inventory upon completion of the grant contract.

Grant funding is being requested for this task.

Deliverables:

Description	Schedule
Project Performance Monitoring Plan	November 2013
Load Reduction Model	March 2014
Annual Reporting to County	Annually

Land Purchase / Easement (Task 5) - Budget Category (b)

There are no land purchase or easement requirements or needs for this project.

Deliverables: None

Assessment and Evaluation (Task 6) - Budget Category (c)

This task is complete as described in the Introduction section.

Deliverables: None

Final Design (Task 7)

The Conservation Districts will work with a local Stakeholder and Technical Advisory Committee (STAC) consisting of local livestock managers and technical specialists (private, NRCS, University and US Fish and Wildlife Services) to develop the scope for implementation of water quality improvement practices. Through site visits, landowners will have one-on-one interaction with Conservation District and NRCS conservation planners who will provide site assessment, detailed recommendations and design assistance. Three to eight priority sites will be selected among livestock facility applicants to implement water quality improvement projects. Specific BMPs implemented and natural resource improvements will vary based on site need and projects selected and will be designed by the STAC and consultants.

Projects can often be planned, permitted and constructed in one year. Plans and specifications will be developed during the grant contract. All best management practices will be designed to NRCS Conservation Practice Standards available on eFOTG. BMPs may include, but are not exclusive to:

- Access Road
- Composting Facility
- Critical Area Planting
- Filter Strip
- Grade Stabilization Structure
- Grassed Waterway
- Stormwater Runoff Control
- Stream Crossing
- Stream Habitat Improvements
- Underground Outlet

Final designs will address the entire facility, although focus may be given to one or a few problem areas. The designs may look like pasture management plans, erosion control plans, and/or water quality management plans depending on the site.

Grant funding is being requested for this task.

Deliverables:

Description	Schedule
50% Design	12/1/2014
Final Design	5/1/2015

Environmental Documentation (Task 8)

Projects tend to be small and on impacted lands. It is expected that most of the projects will fall into a CEQA exemption or fall under an existing Mitigated Negative Declaration for the Partners In Restoration Permit Coordination Program. CEQA documents will be submitted to the State Clearinghouse prior to implementation. No projects will require an Environmental Impact Report.

The Conservation Districts will provide tribal notification consistent with PRC Section 75102.

Grant funding is being requested for this task.

Deliverables:

Description	Schedule
NOE, or other CEQA document	Prior to Construction

Permitting (Task 9)

All work under this task has been completed. Please see the Completed Work section for details and deliverables. There is no further work proposed for this task.

Deliverables: None

Construction Contracting (Task 10) - Budget Category (d)

Contracting will vary by project site. In some instances, landowners will complete all construction without the need for contracting. In other cases a contractor will be hired by the landowner or Conservation Districts through an informal quote process. Competitive bidding will be completed for individual project sites over the value of \$25,000. No project sites are expected to trigger competitive bidding. Conservation Districts will use purchasing policies to direct the form of contracting. There is no need for advertisement for bids expected for this project.

Grant funding is being requested for this task. No work has or will be started until grant funding award.

Construction (Task 11)

The Livestock and Land Program utilizes an incentives-based approach to achieve the cultural change needed for livestock facilities to voluntarily adopt management measures that improve the healthy functioning of watersheds.

Construction and implementation activities are described below:

1.0.12 Convene and Utilize Stakeholder and Technical Advisory Committee (Task 11.1)

Work with a local Stakeholder and Technical Advisory Committee (STAC) consisting of local livestock managers and technical specialists (private, NRCS, University and US Fish and

Wildlife Services) to develop the scope for implementation of water quality improvement practices. Through site visits landowners will have one-on-one interaction with Conservation Districts and NRCS conservation planners who will provide site assessment, detailed recommendations and design assistance.

Deliverables:

Description	Schedule
Priority BMP List	1/31/2015
Final Ranking Criteria	1/31/2015
Short List of Eligible Applicants	2/28/2015
Redacted Water Quality Site Plans	4/1/2014-4/15/2015

1.0.13 Workshops and Trainings (Task 11.2)

Provide technical training series on BMP implementation that also provides an opportunity to recruit livestock owners to participate in implementation site projects. Peer Leaders are also recruited to lead and foster a peer-to-peer network of information transfer. An estimated 25 livestock facility owners will receive between 3 – 12 hours of educational in technical training on water quality and wildlife protective BMPs in this project. In addition to workshop series delivery, we will promote our availability to conduct site visits to provide technical assistance, demonstration site opportunities and NRCS and other support services.

Deliverables:

Description	Schedule
Develop Workshops	4/30/2014
Summary of Workshops Outcomes	5/1/2014- 7/31/2014
Final Application Form	5/31/2014
Program Promotion Materials	6/30/2014
Summary of Follow up Survey	2/1/2015

1.0.14 Water Quality Site Planning (Task 11.3)

All program participants will receive training on how to identify and address opportunities to improve water quality and wildlife habitat on their sites and receive assistance needed to complete a written site plan. All implementation project applicants will complete a site plan as part of their contract to receive project funding support. We anticipate completion of as many as 10 site plans leading to implementation on at least three project sites during the course of this program.



Figure 1-1. Check dams in gulley to reduce erosion and sediment into downstream water ways.

Description	Schedule
Water Quality Site Plans	12/1/2014-5/1/2015

1.0.15 Implementation Sites (Task 11.4)

Three (3) to eight (8) priority sites will be selected among livestock facility applicants to implement water quality and wildlife habitat improvement projects. Specific BMPs implemented and natural resource improvements will vary, based on site need and projects selected, and will be designed by the STAC and consultants. These may include practice changes or infrastructure improvements – or both. Example BMPs include: use of vegetative swales and buffer strips, manure bunkers and other containment practices, installation of rainwater catchment systems, road and trail improvements, reestablishment of vegetation, native upland and riparian vegetation enhancement, stock pond and riparian area improvement and management, and taking high use areas off line in winter. Implementation sites will also serve as demonstrations sites for training opportunities and tours. All projects will be designed according to NRCS standards and specifications in order to meet water quality and wildlife habitat improvement objectives.





Figure 1-2. Impaired site before BMP improvements.

Figure 1-3. Site after BMP improvements (terraced landscape walls to reduce erosion).

Description	Schedule
Summary of BMP Implementation Sites	5/1/2015-8/31/2016
Summary of Implementation Site Tour	7/1/2016-8/31/2016

1.0.16 Peer Leader Program (Task 11.5)

Peer Leaders are recruited during trainings to lead and foster a peer-to-peer network of information transfer. In other counties this has led to livestock owners voluntarily implementing BMPs that are not part of the Demonstration Site funding as a result of a HOOFS Peer Leader. Supporting these leaders will be integral to continuing the influence of the Program beyond the grant contract.

Grant funding is being requested for this task. No work has or will be started until grant funding award.

Deliverables:

Description	Schedule
Promotional/Outreach Materials	2/28/2014
Summary of Peer Leader Outreach	6/30/2015

Environmental Compliance / Mitigation / Enhancement (Task 12) - Budget Category (e)

The Livestock and Land Program involves the implementation of BMPs and, inherent to the program, is considered an environmental mitigation or enhancement. No additional environmental compliance, mitigation or enhancement is required.

Deliverables: None

Description	Schedule
None	None

Construction Administration (Task 13) - Budget Category (f)

Construction Management will occur for the duration of the construction and implementation period. Depending on the project site, the Conservation Districts or the landowner will be responsible for development, negotiation and securing all contracts, including construction contractors, and construction managers consultants. There are two main components of this task, including:

- **Construction Management** The Conservation Districts will provide construction manager(s) and will be responsible for:
 - o Providing assistance during the bid period;
 - o Provide on-site representation for the Conservation Districts;
 - o Perform quality assurance and control practices on the work performed; and
 - Analyze and provide recommendations on contractor claims.
 - Maintain construction contract budget, approve contractor pay requests, construction documentation.
 - Oversees environmental mitigation implementation.
- Engineering Services During Construction (ESDC) The Conservation Districts will provide an engineer or may contract with a design engineering firm. The engineer will be responsible for:
 - Performing submittal review;
 - Responding to contractor requests for information;
 - Issuing clarifications;
 - o Recommending change orders to the owner; and
 - o In terms this project, final design plans act similar to as-built records for the project based on construction documentation.

The Construction Manager or a consultant will also be responsible for reviewing the contractor's payroll submittals for labor compliance as required in the State Standard Specifications and Labor Compliance Program and described in Task 2 Labor Compliance Program.

No work has or will be started until grant funding is awarded. Construction management is not required until the bidding period of the construction phase of the work.

Grant funding is requested for this task.

Description	Schedule
Summary of Workshop Outcomes	Quarterly
Summary of Water Quality Planning Efforts	Quarterly
Construction Progress Reports	Quarterly
Notice of Completion	Quarterly

Shandon State Water Turnout

Proposed Work

San Luis Obispo County (County) is proposing to construct a water turnout facility that will connect the water distribution system for County Service Area 16 (CSA 16) in Shandon, CA to the State Water Project pipeline. The Shandon State Water Turnout Project will allow CSA 16 to access and distribute its State Water allocation of 100 acre-feet per year to the community of Shandon, providing water supply reliability.

Project Administration (Task 1) - Budget Category (a)

The purpose of this task is to keep the project scope, budget and schedule on track, and to communicate project progress with sponsoring agencies, stakeholders, CSA 16, the Shandon Advisory County and other organizations involved with project delivery. This task includes execution and management of all consultant and construction contracts (see the Completed Work section for consultant contracts already in place). The County will continue to oversee and be ultimately responsible for the daily management of the project under this task. Work under this task includes preparation of grant invoices and project agreements associated with project implementation.

In addition to the County's management, the County will enter into a Utilities Reimbursement Agreement for Construction with CCWA to assist with management of construction contracting and construction management. Via this agreement, the County will pay CCWA to oversee construction contracting and construction, including construction inspection required by DWR.

Administration is an on-going task. Project status updates are prepared on a quarterly basis in response to the various stakeholders and their meeting schedules. As milestones are met, the project manager documents and notifies sponsoring agencies and stakeholders.

Deliverables:

Description	Schedule
Utility Reimbursement Agreement for Construction	November 2013
Project Baseline Schedule and Updates	November 2013
Monthly Project Budget and Schedule Updates	Quarterly
Grant Invoices	Quarterly

Labor Compliance Program (Task 2)

The County has an existing Labor Compliance Program consistent with subdivision (b) of Labor Code Section 1771.5. This task involves the work needed to demonstrate compliance with state labor laws. The County of San Luis Obispo will ensure compliance with the State Labor Code in three ways:

- The County will submit to the State a letter with associated exhibits documenting compliance with relevant Labor Code requirements.
- The construction contract special provisions will state that adherence to Caltrans State Standard Specifications is required. Section 7 of the State Standard Specifications addresses the requirements of the State labor code for Public Works projects.
- The Construction Manager will review the contractor's payroll submittals for labor compliance as required in the State Standard Specifications.

Grant funding is not being requested for this work. No work on this task will occur until award of grant funding for the project.

Deliverables:

Description	Schedule
Labor Compliance Documentation	November 2013

Reporting (Task 3)

In support of the IRWM Implementation Grant administration, quarterly project reports will be provided to the County that describes the progress and accomplishments for the quarter and is in accordance with the Project Performance Monitoring Plan as described in Task 4. An assessment of the project schedule and budget, and updated schedules and budgets, if appropriate, will also be included.

Following project close-out, the County will prepare a Final Project Completion Report summarizing the project implementation, demonstrating completion of all task items, and documenting the project costs and grant distributions. The Final Report will be submitted within 90 days of project completion (including environmental mitigation and compliance work). The quarterly reports and final reports shall be prepared consistent with State grant guidelines.

A Post Completion Report will be prepared and submitted within ninety (90) calendar days after the first operational year of the project. The report will describe the project performance and performance monitoring results in accordance with the Project Performance Monitoring Plan. In subsequent years, the Post Completion Report will be prepared and submitted no later than March 15 of each year. The reporting will occur annually for a total of 10 years after the completed project begins operation.

Description	Schedule	
Quarterly Reports	Quarterly	
Final Project Completion Report	90 days after project completion	
Post Completion Report	Annually; March 15, 2015 to March 15, 2025	

Project Performance Monitoring Plan (Task 4)

This task includes all activities necessary to develop the Project Performance Monitoring Plan, implement the plan, and manage and share the data collected during the monitoring as described in Attachment 6 Monitoring, Assessment, and Performance Measures.

1.0.17 Project Performance Monitoring Plan (Task 4.1)

The Project Performance and Monitoring Plan (PPMP) will be prepared at the initiation of the Shandon State Water Project Turnout project implementation and will outline how the project performance will be assessed and evaluated. The PPMP will lay out an evaluation and assessment process based on the San Luis Obispo Regional Integrated Proposal goals and outcomes. The PPMP will present the planned project monitoring, assessment and performance measures that will demonstrate that the project will meet its intended goals, achieve measureable outcomes and provide value to the State of California.

The PPMP will include the following items:

- Shandon State Water Turnout project goals
- Desired outcome of the project
- Performance indicators measures to evaluate change that is the direct result of the project
- Measurement tools and methods: CCWA will be responsible to monitor and measure the metered flows delivered to Shandon through the turnout facility
- Targets measureable targets that are feasible to meet during the life of the project

The PPMP will define the parameters and process for measuring performance indicators to demonstrate progress towards the project goals. The completed project will be evaluated against the following goals to determine the project's performance.

Goal #1 – Provide additional water supply for the Shandon community (CSA 16) and, thus, reduce the amount of Paso Basin groundwater pumping.

Goal #2 - Reduce CSA16's energy consumption by reducing their need for groundwater pumping.

The level of success achieved by the project will be measured by the amount of water delivered to CSA 16 through the State Water Turnout. Any water that is delivered to CSA 16 via the project will reduce the amount of groundwater drawn from the Paso Basin by the community.

4.5.2 Monitoring Activities (Task 4.2)

The County will perform the following monitoring activities, which will be fully described in the PPMP and are subject to change based on the details developed during preparation of the final PPMP:

State Water Metering (by CCWA)
 Monthly

• Energy Metering (by PG&E) Monthly

• Energy Consumption Comparison Annually

1.0.18 Data Management and Sharing

All data required for monitoring the performance of the Shandon State Water Turnout Project will be gathered by the County. State Water metering information will be provided to the County by CCWA in the form of a monthly report, which CCWA also required to provide to DWR. Energy metering will be provided to the County by Pacific Gas & Electric (PG&E) in the form of a monthly bill. The County is only required to report gathered information to DWR for the purposes of this grant program.

Grant funding is not being requested for this task.

Deliverables:

Description	Schedule
Project Performance Monitoring Plan	December 2013

Land Purchase / Easement (Task 5) - Budget Category (b)

All improvements made and facilities constructed for the Shandon State Water Turnout Water Project will be constructed within existing County right-of-way and State Department of Water Resources right-of-way. Thus, the project will not require purchase of land or easements.

Deliverables: None

Assessment and Evaluation (Task 6) - Budget Category (c)

All planning and study work under this task has been completed. Please see the Completed Work section for details and deliverables. There is no further work proposed for this task.

Deliverables: None

Final Design (Task 7)

All work under this task will have been completed by the October 2013 date established by DWR for work plan activities. Please see the Completed Work section for details and deliverables. There is no further work proposed for this task.

Deliverables: None

Environmental Documentation (Task 8)

All CEQA and required environmental documentation work under this task has been completed. Please see the Completed Work section for details and deliverables. There is no further work proposed for this task.

Deliverables: None

Permitting (Task 9)

All environmental and construction permitting work under this task has been completed. Please see the Completed Work section for details and deliverables. There is no further work proposed for this task.

Deliverables: None

Construction Contracting (Task 10) - Budget Category (d)

Work under this task includes the cost to prepare and distribute project bid packages to interested bidders, advertise the project, conduct a pre-bid meeting, review, prepare and respond to bidder's requests for information, evaluate bids and award the construction contract for the Shandon CSA 16 State Water Turnout project. This task will be monitored and overseen by the San Luis Obispo County Public Works staff with implementation responsibility by CCWA.

Grant funding is not being requested for this task. No work has or will be started until grant funding award. The schedule for advertisement of bids for the project is as follows:

Bid Activities	Schedule
CCWA Approval to Advertise Project	December 2013
Bid Opening	January 2014
Letter Awarding Contract	January 2014
Executed Construction Contract	January 2014
Notice to Proceed	February 2014

Construction (Task 11)

Construction of the project will begin after the contractor has been chosen, the contract awarded and compliance with any necessary pre-construction permit conditions. Construction of the project will proceed in the following manner:

- Subtask 11.1 Mobilization, Fencing and Site Demolition
- Subtask 11.2 Connection to Existing Shandon CSA 16 distribution system
- Construction of the connection will consist of a piping connection to the existing CSA 16 10-inch flange stubbed from the 48-inch State pipeline. The connection will require the installation of fittings, valves and 2" PVC piping. CSA 16 well water treatment facilities will be upgraded to provide chloramine treatment to match SWP water treatment.
- Subtask 11.3 Connection to State Water Turnout
- Construction of the turnout will require installation of a concrete vault to house the
 turnout equipment. This equipment includes piping, an actuated flow control valve,
 isolation valves, flow meter, air release valves and drain valves. To incorporate the
 turnout into the State system, a Supervisory Control and Data Acquisition (SCADA)
 system will be connected to an existing power source and backup power supply will be
 installed.
- Subtask 11.4 Water Sampling, Performance Testing and Demobilization

Grant funding is being requested for this task. No work has or will be started until grant funding award.

Deliverables:

Description	Schedule
Construction of Project	February 2014 to August 2014
Construction Reporting and Documentation	Refer to Task 13

Environmental Compliance / Mitigation / Enhancement (Task 12) - Budget Category (e)

Since construction of the project will occur entirely within already disturbed DWR and County right-of-way, no environmental mitigation or enhancement is anticipated as part of the project.

Deliverables: None

Construction Administration (Task 13) - Budget Category (f)

Construction Management will occur for the duration of the construction period. The County of San Luis Obispo has contracted with CCWA to develop, negotiate and secure all contracts on behalf of the County. Responsibilities include securing engineering services during construction,

construction contractors, construction managers, and environmental monitoring consultants. There are two main components of this task, including:

- **Construction Management** CCWA will provide construction management and project oversight on behalf of the County Public Works Department and will be responsible for:
 - o Providing assistance during the bid period;
 - o Provide on-site representation for the County;
 - o Perform quality assurance and control practices on the work performed;
 - o Analyze and provide recommendations on contractor claims;
 - Maintain construction contract budget, approve contractor pay requests, construction documentation;
 - Review contractor's payroll submittals for labor compliance as required in the State Standard Specifications and Labor Compliance Program; and
 - Oversee environmental mitigation implementation.
- Engineering Services During Construction (ESDC) CCWA has contracted with the design engineering firm, AECOM, to provide engineering services during construction. The engineer will be responsible for:
 - o Performing submittal review;
 - o Responding to contractor requests for information;
 - Issuing clarifications;
 - o Recommending change orders to the owner; and
 - o Creating project record drawings based on construction documentation.

No work has or will be started until grant funding award. Construction management is not required until the bidding period of the construction phase of the work.

Grant funding is being requested for this task. No work has or will be started until grant funding award.

Deliverables:

Description	Schedule
Monthly Construction Progress Reports	Ongoing during Construction
ESDC Documentation	Ongoing during Construction
Notice of Completion	July 2014
Record Drawings	August 2014

San Miguel Critical Water System Improvements

Proposed Work

The San Miguel Community Services District (District) needs to implement all six of these identified projects in the immediate future, or they will be faced with continued deterioration of an already deficient water system, and may not be able to support even limited beneficial growth with the identified deficiencies that face the District's water system.

- 1. **Well 3 Rehabilitation** Well 3 is over 40 years old and requires upgrades in the well motor housing, disinfection system, electrical wiring, backup power generation and the protective structural building.
- 2. **Emergency Backup Power** Equip Well 3 and Well 4 with power generators in the event of power failures to maintain a minimum supply of water during widespread power outages.
- 3. **New Fire Hydrants and Wharf Head Replacements** Thirteen (13) new fire hydrants to replace inadequate and aging hydrants.
- 4. **New Water Well Siting Study** Respond to the urgent need of replacing the San Lawrence Terrace Well, taken out of service because of high arsenic concentrations, and providing water supply redundancy in the event of an emergency shutdown of any three existing wells.
- 5. **New Water Storage Tank** Construct the San Lawrence Terrace Water Storage Tank with 0.25 million gallons for capacity and water quality improvements
- 6. **12th and K Street Water Main Upgrades** Replace old and undersized piping at 12th Street and K Street.

Project Administration (Task 1) - Budget Category (a)

The purpose of this task is to keep the project scope, budget and schedule on track, execution and management of consultant and construction contracts, and to communicate project progress with District and County staff and Boards. Work under this task also includes preparation of grant invoices and project agreements associated with project implementation. The District has and will continue to be responsible for the daily management of the project under this task.

The Project Administration task is an on-going task. Project status updates to the County will be prepared on a monthly basis. As milestones are met, the project manager documents and notifies sponsoring agencies and stakeholders.

Grant funding is being requested for this task.

Description	Schedule
Utility Reimbursement Agreement for Construction	November 2013
Project Baseline Schedule and Updates	November 2013
Monthly Project Budget and Schedule Updates	Quarterly
Grant Invoices	Quarterly

Labor Compliance Program (Task 2)

San Miguel CSD has an existing Labor Compliance Program consistent with subdivision (b) of Labor Code Section 1771.5. This task involves the work needed to demonstrate compliance with state labor laws. The San Miguel CSD will ensure compliance with the State Labor Code in three ways:

- San Miguel CSD will submit to the State a letter with associated exhibits documenting compliance with relevant Labor Code requirements.
- The construction contract special provisions will state that adherence to Caltrans State Standard Specifications is required. Section 7 of the State Standard Specifications addresses the requirements of the State labor code for Public Works projects.
- The Construction Manager will review the contractor's payroll submittals for labor compliance as required in the State Standard Specifications.

Grant funding is being requested for this work. No work on this task will occur until award of grant funding for the project.

Deliverables:

Description	Schedule	
Labor Compliance Documentation	To Be Provided at Beginning of Construction Contr	

Reporting (Task 3)

In support of the IRWM Implementation Grant administration, quarterly project reports will be provided to the County that describes the progress and accomplishments for the quarter and is in accordance with the Project Performance Monitoring Plan as described in Task 4. An assessment of the project schedule and budget, and updated schedules and budgets, if appropriate, will also be included. Following project close-out, the County will prepare a Final Project Completion Report summarizing the project implementation, demonstrating completion of all task items, and documenting the project costs and grant distributions. The Final Report will be submitted within 90 days of project completion (including environmental mitigation and compliance work). The quarterly reports and final reports shall be prepared consistent with State grant guidelines.

A Post Completion Report will be prepared and submitted within ninety (90) calendar days after the first operational year of the project. The report will describe the project performance and performance monitoring results in accordance with the Project Performance Monitoring Plan. In subsequent years, the Post Completion Report will be prepared and submitted no later than March 15 of each year. The reporting will occur annually for a total of 10 years after the completed project begins operation.

Deliverables:

Description	Schedule
Quarterly invoices and reports	Quarterly
Final Project Completion Report	90 days after total project completion
Post Completion Report	Annually; March 15, 2015 to March 15, 2025

Project Performance Monitoring Plan (Task 4)

This task includes all activities necessary to develop the Project Performance Monitoring Plan, implement the plan, and manage and share the data collected during the monitoring as described in Attachment 6 Monitoring, Assessment, and Performance Measures.

1.0.19 Develop Monitoring Plan (Task 4.1)

A Project Performance and Monitoring Plan (PPMP) will be prepared at the initiation of project implementation to outline how project performance will be assessed and evaluated. Because the identified projects for the District will have immediate identifiable and measurable results and additional monitoring is not anticipated, a streamlined PPMP is expected. However, there are three project goals that the completed projects will be evaluated against to determine their performance.

- Goal #1 –Provide adequately disinfected and safe drinking water for the entire community.
 - O Performance will be measured through continued monthly and annual water sampling as required by CDPH.
- Goal #2 Provide adequate water storage and pressure needed to meet CDPH standards and provide adequate fire protection flows.
 - Water storage needs were calculated and identified in 2002 during the Water Master planning effort and are already completed. For pressure, field flow testing measurements and follow up hydraulic modeling will be performed upon completion of the SLT tank construction, and 12th/K Street water main upgrades to determine that adequate flows have been achieved.
- Goal #3 Provide adequate water supply and reliability.
 - O Performance for supply will be measured through the completion of a new water well siting study and identification of a suitable location for at least one new municipal water supply well, in addition to rehabilitating the improvements at Well 3. Performance for reliability will be acceptance by CDPH of an updated permit the District will submit following the emergency backup power project at Wells 3 and 4.

1.0.20 Monitoring Activities (Task 4.2)

As defined in the PPMP, the District will monitor water system performance using electronic metering and sensor devices located throughout the water distribution system including at each municipal production well and storage tank.

• Flow Testing Monthly

• Water Quality Testing Monthly and Annual

Pressure Monitoring Monthly Storage Level Monitoring Monthly

1.0.21 Data Management and Sharing (Task 4.3)

As defined in the PPMP, the District will manage the data in a Microsoft Excel Format and provide annual reporting to the County.

Grant funding is being requested for this task.

Deliverables:

Description	Schedule
Project Performance Monitoring Plan	November 2013
Data Management Tool	March 2014
Annual Reporting to County	March 2014

Land Purchase / Easement (Task 5) - Budget Category (b)

The District is in possession of all properties for the projects, with the exception of the San Lawrence Terrace (SLT) water storage tank and the New Water Well Siting Study.

For the San Lawrence Terrace (SLT) water storage tank project, land acquisition (expansion of current private property easement) may be required for the new tank and/or access to the tank site. As part of the design phase (Task 7), the District will assess siting constraints and determine if additional easements are needed.

For the New Water Well Siting Study, it is envisioned that during the early planning phase of the project (Task 6), the District, in conjunction with design engineers and hydrogeologists, will identify potential new water well sites, approach property owners if needed, and secure right of entry permits for test well drilling and field/site investigation work. No other easements or property acquisitions will be required at this time.

Deliverables:

Description	Schedule
New Water Storage Tank Appraisal for Easements	March 2014
New Water Storage Tank Permanent Easement/Title	September 2014
New Water Well Siting Study Rights of Entry	May 2014

Assessment and Evaluation (Task 6) - Budget Category (c)

The District completed a water master plan in 2002 and has provided on-going water system assessments and evaluations through the course of day-to-day operations of their water system over the years which are the basis for the projects contained in this proposal. The only project that requires further assessment and evaluation is the New Water Well Siting Study, which requires test well drilling and field/site investigation work to confirm the appropriate location.

Grant funding is being requested for this task.

Deliverables:

Description	Schedule
New Water Well Siting Study Test Well Drilling and Site Investigation	May 2014

Final Design (Task 7)

This San Miguel Water System Improvements Project consists of various critical water system improvements combined into a single project that will directly improve water supply reliability, public health and safety, and water quality. The following table describes the work necessary to complete project plans and specifications (PS&E) and the design standards that will be used for each of these projects.

Project	Work Necessary to	Design Standards to be Used
	Complete PS&E	
Well 3 Rehabilitation	PS&E to be initiated	National/California Electrical Code
		Uniform Building Code
		California DPH (disinfection
		guidelines)
Emergency Backup Power	PS&E to be initiated	National/California Electrical Code
New Fire Hydrants and Wharf Head	Work to be performed in-	2011 County of San Luis Obispo
Replacements	house.	Standard Drawings, Drawing W-2
	No PS&E required.	
New Water Well Siting Study	Study to be initiated.	California DWR Well Drilling
	PS&E is not part of this	Regulations
	project.	California DPH Regulations for Well
		Siting and Design
New Water Storage Tank	PS&E to be initiated	AWWA D100 for Tank/Seismic
		Design
		AWWA Standards for Water System
		Disinfection
12th and K Street Water Main	PS&E to be initiated	2011 County of San Luis Obispo
Upgrades		Standard Drawings for Thrust
		Blocks, Trench Details, Pavement
		Restoration, AWWA Standards for
		PVC Pipe

Project	30%	60%	90%	Date
Well 3 Rehabilitation	02/14	03/14	04/14	05/14
Emergency Backup Power	03/14	05/14	06/14	07/14
New Fire Hydrants and Wharf Head Replacements	N/A	N/A	N/A	02/14
New Water Well Siting Study	N/A	01/14	02/14	03/14
New Water Storage Tank	04/14	05/14	06/14	07/14
12th and K Street Water Main Upgrades	12/13	01/14	02/14	03/14

Environmental Documentation (Task 8)

The following environmental impact reports will be completed. As shown in the table, four of the six projects qualify for CEQA Categorical Exemptions and a fifth project does not trigger CEQA. The New Storage Tank will likely require a Mitigated Negative Declaration due to construction related and visual impacts (i.e. noise, dust, visual appearance, etc.).

Project	Environmental Document Anticipated	Date
Well 3 Rehabilitation	CEQA – Categorical Exemption (CE)	July 2014
Emergency Backup Power	CEQA - CE	September 2014
New Fire Hydrants and Wharf Head Replacements	CEQA - CE	April 2014
New Water Well Siting Study	N/A	NA
New Water Storage Tank	Mitigated Negative Declaration(MND)	September 2014
12th and K Street Water Main Upgrades	CEQA - CE	May 2014

Permitting (Task 9)

The following permitting requirements will be completed.

Deliverables:

Project	Permit	Status
Well 3 Rehabilitation	County encroachment permit;	Upon Construction Award;
	CDPH Permit Update	Prior to construction
Emergency Backup Power	CDPH Permit Update;	Prior to construction;
	SCAQMD Permit	During Construction
New Fire Hydrants and Wharf Head	County encroachment permit	Upon Construction Award
Replacements		
New Water Well Siting Study	Right of entry permit	Prior to field/site investigation
New Water Storage Tank	CDPH Permit Update	Prior to Construction
12th and K Street Water Main Upgrades	County encroachment permit	Upon Construction Award

Construction Contracting (Task 10) - Budget Category (d)

Work under this task includes the preparation and distribution of project bid packages to interested bidders, advertise the project, conduct a pre-bid meeting, review, prepare and respond to bidder's requests for information, evaluate bids and award the construction contract for the San Miguel sub-projects.

Grant funding is being requested for this task. No work has or will be started until grant funding award. The schedule for advertisement of bids for each sub-project is as follows:

Well 3 Rehabilitation Bid Activities	Schedule
Bid Advertise	May 2014
Bid Opening	May 2014
Letter Awarding Contract	June 2014
Executed Construction Contract	July 2014
Notice to Proceed	August 2014
Emergency Backup Power Bid Activities	Schedule
Bid Advertise	July 2014
Bid Opening	July 2014
Letter Awarding Contract	August 2014
Executed Construction Contract	September 2014
Notice to Proceed	October 2014
New Fire Hydrants and Wharf Head Replacements Bid Activities	Schedule
Bid Advertise	February 2014
Bid Opening	NA
Letter Awarding Contract	March 2014
Executed Construction Contract	April 2014
Notice to Proceed	May 2014
New Water Well Siting Study Bid Activities	Schedule
New Water Well Siting Study Bid Activities	Schedule
New Water Well Siting Study Bid Activities Bid Advertise	Schedule March 2014
New Water Well Siting Study Bid Activities Bid Advertise Bid Opening	Schedule March 2014 NA
New Water Well Siting Study Bid Activities Bid Advertise Bid Opening Letter Awarding Contract	Schedule March 2014 NA April 2014
New Water Well Siting Study Bid Activities Bid Advertise Bid Opening Letter Awarding Contract Executed Construction Contract	Schedule March 2014 NA April 2014 May 2014
New Water Well Siting Study Bid Activities Bid Advertise Bid Opening Letter Awarding Contract Executed Construction Contract Notice to Proceed	Schedule March 2014 NA April 2014 May 2014 June 2014
New Water Well Siting Study Bid Activities Bid Advertise Bid Opening Letter Awarding Contract Executed Construction Contract Notice to Proceed New Water Storage Tank Bid Activities	Schedule March 2014 NA April 2014 May 2014 June 2014 Schedule
New Water Well Siting Study Bid Activities Bid Advertise Bid Opening Letter Awarding Contract Executed Construction Contract Notice to Proceed New Water Storage Tank Bid Activities Bid Advertise	Schedule March 2014 NA April 2014 May 2014 June 2014 Schedule July 2014
New Water Well Siting Study Bid Activities Bid Advertise Bid Opening Letter Awarding Contract Executed Construction Contract Notice to Proceed New Water Storage Tank Bid Activities Bid Advertise Bid Opening	Schedule March 2014 NA April 2014 May 2014 June 2014 Schedule July 2014 July 2014
New Water Well Siting Study Bid Activities Bid Advertise Bid Opening Letter Awarding Contract Executed Construction Contract Notice to Proceed New Water Storage Tank Bid Activities Bid Advertise Bid Opening Letter Awarding Contract	Schedule March 2014 NA April 2014 May 2014 June 2014 Schedule July 2014 July 2014 August 2014
New Water Well Siting Study Bid Activities Bid Advertise Bid Opening Letter Awarding Contract Executed Construction Contract Notice to Proceed New Water Storage Tank Bid Activities Bid Advertise Bid Opening Letter Awarding Contract Executed Construction Contract	Schedule March 2014 NA April 2014 May 2014 June 2014 Schedule July 2014 July 2014 August 2014 September 2014
New Water Well Siting Study Bid Activities Bid Advertise Bid Opening Letter Awarding Contract Executed Construction Contract Notice to Proceed New Water Storage Tank Bid Activities Bid Advertise Bid Opening Letter Awarding Contract Executed Construction Contract Notice to Proceed	Schedule March 2014 NA April 2014 May 2014 June 2014 Schedule July 2014 July 2014 August 2014 September 2014 October 2014
New Water Well Siting Study Bid Activities Bid Advertise Bid Opening Letter Awarding Contract Executed Construction Contract Notice to Proceed New Water Storage Tank Bid Activities Bid Advertise Bid Opening Letter Awarding Contract Executed Construction Contract Notice to Proceed 12th and K Street Water Main Upgrades Bid Activities	Schedule March 2014 NA April 2014 May 2014 June 2014 Schedule July 2014 July 2014 August 2014 September 2014 October 2014 Schedule
New Water Well Siting Study Bid Activities Bid Advertise Bid Opening Letter Awarding Contract Executed Construction Contract Notice to Proceed New Water Storage Tank Bid Activities Bid Advertise Bid Opening Letter Awarding Contract Executed Construction Contract Notice to Proceed 12th and K Street Water Main Upgrades Bid Activities Bid Advertise	Schedule March 2014 NA April 2014 May 2014 June 2014 Schedule July 2014 July 2014 August 2014 September 2014 October 2014 Schedule March 2014
New Water Well Siting Study Bid Activities Bid Advertise Bid Opening Letter Awarding Contract Executed Construction Contract Notice to Proceed New Water Storage Tank Bid Activities Bid Advertise Bid Opening Letter Awarding Contract Executed Construction Contract Notice to Proceed 12th and K Street Water Main Upgrades Bid Activities Bid Opening	Schedule March 2014 NA April 2014 May 2014 June 2014 Schedule July 2014 July 2014 August 2014 September 2014 October 2014 Schedule March 2014 March 2014

Construction (Task 11)

Work under this task includes all construction activities for completion of the sub-project elements.

Grant funding is being requested for this task. No work has or will be started until grant funding award.

The schedule for construction for each sub-project is as follows:

Well 3 Rehabilitation Activities	Schedule
Mobilization	August 2014
Pre-Construction Meeting	August 2014
Site Work and Demolition	September 2014
Building Erection, Yard Piping	September 2014
Pump to Waste Tie-In	November 2014
Startup and Testing	November 2014
Punch-list	December 2014
File Notice of Completion	December 2014
As-built Drawings	January 2015
Project Complete	January 2015
Emergency Backup Power Activities	Schedule
Mobilization	October 2014
Pre-Construction Meeting	October 2014
Electrical/Generator Installation	October 2014
Startup and Testing	November 2014
Punch-list	December 2014
File Notice of Completion	December 2014
As-built Drawings	January 2015
Project Complete	January 2015
New Fire Hydrants and Wharf Head	Schedule
Replacements Activities	NA 2014
Mobilization	May 2014
Pre-Construction Meeting	May 2014
Site Work and Demolition	May 2014
Install Hydrants	June 2014
Pavement Restoration	June 2014
Startup and Testing	NA
Punch-list	June 2014
File Notice of Completion	June 2014
Update Water Atlas Maps	July 2014
Project Complete	July 2014

New Water Well Siting Study Activities	Schedule
Mobilization	June 2014
Pre-Construction Meeting	June 2014
Site Access/Drill Well	June 2014
Field Pump and Water Quality Testing	June 2014
Startup and Testing	NA
Punch-list	July 2014
File Notice of Completion	NA
Complete Hydrogeologic Report and	
Recommendations	July 2014
Project Complete	July 2014
New Water Storage Tank Activities	Schedule
Mobilization	October 2014
Pre-Construction Meeting	October 2014
Site Work/Yard Piping	October 2014
Tank Pad	November 2014
Tank Erection	December 2014
Tank Coating	December 2014
Leak Test/Disinfection	February 2015
Startup/Test Cathodic Protection System	March 2015
Punch-list	March 2015
File Notice of Completion	March 2015
As-Built Drawings/Update Atlas Maps	April 2015
Project Complete	April 2015
12th and K Street Water Main Upgrades Activities	Schedule
Mobilization	June 2014
Pre-Construction Meeting	June 2014
Pipe Installation	June 2014
Disinfect, Pressure Testing	August 2014
Punch-list	September 2014
File Notice of Completion	September 2014
As-built Drawings/Update Atlas Maps	October 2014
Project Complete	October 2014

Environmental Compliance / Mitigation / Enhancement (Task 12) - Budget Category (e)

Grant funding is being requested for this task. No work has or will be started until grant funding award. At this time, environmental work has not begun. Thus, there are no identified mitigation measures at this time. Once environmental review is complete, SMCSD in conjunction with District Engineer and the Environmental Consultant, document identified mitigation measures required during construction. However, the level of environmental compliance, mitigation or enhancement is not expected to be rigorous give the limited CEQA analysis required and the type of project activities.

Description	Schedule
Environmental Mitigation	Upon Implementation of
	Mitigation Measures

Construction Administration (Task 13) - Budget Category (f)

Construction Management will occur in varying levels and degrees, for each sub-project, for the duration of the construction period. The District and District Engineer will be responsible for development, negotiation and securing all contracts, including construction contractors, construction managers, and environmental monitoring consultants. There are two main components of this task, including:

- **Construction Management** The District will provide construction manager(s) and will be responsible for:
 - o Providing assistance during the bid period;
 - o Provide on-site representation for the District;
 - o Perform quality assurance and control practices on the work performed; and
 - o Analyze and provide recommendations on contractor claims.
 - Maintain construction contract budget, approve contractor pay requests, construction documentation.
 - Oversees environmental mitigation implementation.
- Engineering Services During Construction (ESDC) Engineering services will be contracted with the District Engineer. The engineer will be responsible for:
 - o Performing submittal review;
 - Responding to contractor requests for information;
 - Issuing clarifications;
 - o Recommending change orders to the owner; and
 - o Creating as-built records for the project based on construction documentation.

The Construction Manager will also be responsible for reviewing the contractor's payroll submittals for labor compliance as required in the State Standard Specifications and Labor Compliance Program.

Grant funding is being requested for this task. No work has or will be started until grant funding award.

Deliverables:

Description	Schedule
Monthly Construction Progress Reports	Ongoing
ESDC Documentation	Ongoing
Notice of Completion	See Task 10 Above
Record Drawings	See Task 10 Above

San Simeon Supplemental Water Supply Feasibility Study and Design Project

Proposed Work

San Simeon Community Services District (SSCSD) is pursuing a supplemental water supply project to increase water supply resources to the small disadvantaged community (DAC) of San Simeon. Underlying San Simeon is a small groundwater basin (Pico Creek Valley Groundwater Basin, 62.5 acres⁴²) bounded by the Pacific Ocean to the west and extends inland about 7,000 feet under the stream channel and floodplain of Pico Creek. The clean water aquifer is dependent on the local watershed to recharge and protect the basin each year, especially during extended drought conditions.

As per Exhibit E of the Round 2 Proposal Solicitation Package Guidelines, DACs are given special preference in permitting the study and planning of critical water supply or water quality needs. This project is submitted under the Expanded Project Eligibility allowance based on the DAC status of the SSCSD service area and the critical water supply, water quality, and water system improvements needed to provide safe, reliable drinking water and fire protection.

As a planning level project for a documented DAC, no construction activities are expected to occur from this grant request. Field work to be performed by engineering and environmental consultants is going to be limited to water quality sampling, soil investigations, and setting up monitoring equipment at a well or in Pico Creek.

Project Administration (Task 1) - Budget Category (a)

The purpose of this task is to keep the project scope, budget and schedule on track, execution and management of consultant and construction contracts, and to communicate project progress with District and County staff and Boards. Work under this task also includes preparation of grant invoices and project agreements associated with project implementation. The District has and will continue to be responsible for the daily management of the project under this task.

The Project Administration task is an on-going task. Project status updates to the County will be prepared on a monthly basis. As milestones are met, the project manager documents and notifies sponsoring agencies and stakeholders.

Grant funding is being requested for this task.

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⁴² TM No. 2, Water Supply Inventory and Assessment, (Carollo Engineers, March 2010)

Description	Schedule
Project Baseline Schedule and Updates	January 2014
Monthly Project Budget and Schedule Updates	Quarterly
Grant Invoices	Quarterly

Labor Compliance Program (Task 2)

No Labor Compliance Program will be required for this feasibility/design study project.

Deliverables: None

Reporting (Task 3)

In support of the IRWM Implementation Grant administration, quarterly project reports will be provided to the County that describes the progress and accomplishments for the quarter and is in accordance with the Project Performance Monitoring Plan as described in Task 4. An assessment of the project schedule and budget, and updated schedules and budgets, if appropriate, will also be included. Following project close-out, the County will prepare a Final Project Completion Report summarizing the project implementation, demonstrating completion of all task items, and documenting the project costs and grant distributions. The Final Report will be submitted within 90 days of project completion (including environmental mitigation and compliance work). The quarterly reports and final reports shall be prepared consistent with State grant guidelines.

A Post Completion Report will be prepared and submitted within ninety (90) calendar days after the first year anniversary of project completion. The report will describe the project performance and performance monitoring results in accordance with the Project Performance Monitoring Plan. In subsequent years, the Post Completion Report will be prepared and submitted no later than March 15 of each year. The reporting will occur annually for a total of 10 years after the completed project begins operation.

Tribal notifications are required for all projects funded by Proposition 84. If awarded, all appropriate tribal notifications will be made.

Deliverables:

Description	Schedule
Quarterly invoices and reports	Quarterly
Final Project Completion Report	90 days after total project completion
Post Completion Report	Annually; March 15, 2015 to March 15, 2025

Project Performance Monitoring Plan (Task 4)

This task includes all activities necessary to develop the Project Performance Monitoring Plan, implement the plan, and manage and share the data collected during the monitoring as described in Attachment 6 Monitoring, Assessment, and Performance Measures.

1.0.22 Project Performance Monitoring Plan (Task 4.1)

A Project Performance and Monitoring Plan (PPMP) will be prepared at the initiation of project implementation to outline how project performance will be assessed and evaluated. Performance of successful completion of the feasibility/design study project will be measured after each phase of the study completion and the final design report for the preferred alternative. There are two project goals that will be evaluated against to determine project performance.

- Goal #1 Feasibility Study Completion
 - o Identification of project alternatives.
 - o Draft Feasibility Report for review and comment.
 - o Final Feasibility Report
- Goal #2 Design Report
 - o 30 % Design Report
 - o CEQA Compliance
 - o 50% Design Report
 - o 90% Design Report

1.0.23 Monitoring Activities (Task 4.2)

As defined in the PPMP, the District will monitor the completion of the Feasibility Study and Design Report

Deliverables:

Description	Schedule
Quarterly Progress Reports	Quarterly

1.0.24 Data Management and Sharing (Task 4.3)

No data management or sharing will be required beyond dissemination of the quarterly reports.

Land Purchase / Easement (Task 5) - Budget Category (b)

No land or easement purchases or dedications will be required of this feasibility/design study project.

Deliverables: None

Assessment and Evaluation (Task 6) - Budget Category (c)

The District completed a water master plan in 2007 and has provided on-going water system assessments and evaluations through the course of day-to-day operations of their water system over the subsequent years leading up to this proposal. The feasibility/design study project will have the following assessment and evaluation elements:

1.0.25 Project Scope (Task 6.1)

The project scope is tailored to assist the San Simeon Community, a DAC, in bringing their critical supplemental water supply needs to the point where financing can be pursued for actual construction. Through Proposition 84 and other grant programs providing assistance to DACs, full implementation of their CIP is planned to begin as early as 2015.

The primary technical goal of this Project is to find supplemental water supplies to increase SSCSD's safe and sustainable water supplies to average 140 AFY, their existing surface water entitlement. The Feasibility Study will recommend a comprehensive set of actions designed to supplement the available water supplies while simultaneously reducing salinity intrusion, enhancing drinking water quality and improving groundwater and watershed management. The actions will include a combination of capital improvement projects, long-term groundwater and watershed management activities and initial baseline performance monitoring. It is the hope that this program is viewed as self-mitigating that will allow regulatory and permitting agencies to issue multi-year permits for the efficient implementation of the program components.

The following SSCSD Feasibility Study elements are proposed:

- 1. Assess Current and Future Water Demands
- 2. Compile Available Watershed and Hydrogeologic Data
- 3. Apply Integrated Surface Water and Groundwater Three-Dimensional Model over Pico Valley Watershed
- 4. Investigate Possible Water Supply Alternatives and Assess Potential Benefits and Impacts
- 5. Consider Water Treatment Options for Short-list of Preferred Alternatives
- 6. Conduct Preliminary Environmental Assessment of Preferred Alternatives Including Primary Capital Facilities
- 7. Model Potable Water Distribution System and Determine Needed In-System Improvements
- 8. Compile Feasibility Study and 5-year Capital Improvement Project List to Document Recommended Water Supply Capital Program
- 9. Develop a 30 Percent Design and Construction Cost Estimate (prepared in standard CSI 16 division format)

Description	Schedule
Complete Request for Proposals (RFP) to Solicit Qualified Consultants	March 2014
Review and Rank Proposals	April 2014
Conduct Interviews, if needed	April 2014
Finalize Scope of Work with Consultant Team	May 2014
Approve Consultant Contract and Kick-off Meeting	June 2014
Working Group Meetings	Every Month
Community Outreach Meetings	At Alternatives Analysis and
	Environmental Assessment Stages
Draft Report	April 2015
Final Report	June 2015

Final Design (Task 7)

The project includes design of the alternatives recommended in the feasibility/design scope of work described in Task 6.1. The design will include a 30% design element to bring completion of priority projects to the point where final design and construction can be pursued through financial applications immediately upon completion of the feasibility/design study.

Deliverables: Included in Final Report

Environmental Documentation (Task 8)

Based on the factual presentation of a thorough alternatives analysis, the alternative will be required to gain Program-Level CEQA review. Project-level CEQA analysis will be required so design of the preferred alternative can move forward. For planning purposes, the preferred alternative project is assumed to require a CEQA mitigated negative declaration based on probable solutions working with existing water and wastewater facilities and on property where current uses are compatible with water-type projects.

The key elements of the CEQA analysis include:

- 1. Project Description
- 2. Environmental Analysis
- 3. Local Stream Fisheries
- 4. Groundwater Resources
- 5. Growth Inducement Potential and Secondary Effects of Growth
- 6. Alternatives Analysis
- 7. Other CEQA Issues (e.g., Cumulative Impacts, Unavoidable Adverse Impacts, etc.)

Grant funding is being requested for this task.

Deliverables: Included in final report.

Permitting (Task 9)

All project permitting requirements will be identified and considered in the feasibility/design study and CEQA documentation. Initial contact will take place with permitting agencies to establish a contact and schedule for permit applications.

Deliverables: Included in final report.

Construction Contracting (Task 10) - Budget Category (d)

1.0.26 Construction Contracting (Task 10)

This project does not include the construction of the recommended alternative. However, the objective is to develop and design a project where final design, financing, and construction contracting will all take place within 3 months of each other after securing financing method.

Deliverables: None

Construction (Task 11)

No large construction contracts will take place with this proposal.

Deliverables: None

Environmental Compliance / Mitigation / Enhancement (Task 12) - Budget Category (e)

No Environmental Compliance / Mitigation / Enhancement will be needed for this project.

Construction Administration (Task 13) - Budget Category (f)

No Construction Administration will be needed for this project.

IRWM Implementation Grant Administration

Proposed Work

San Luis Obispo County (County) will be the grant administrator and fiscal agent for the Proposition 84 IRWM Implementation Grant, if awarded. The purpose of this grant administration project is to:

- Develop, negotiate, and secure all grant agreements necessary for grant award and implementation.
- Monitor and communicate project and grant progress with DWR and prepare quarterly grant reports consistent with State grant guidelines.
- Document compliance with the Labor Compliance Plan requirements.
- Prepare and submit to DWR a Final Project Completion Report summarizing the project implementation consistent with State grant guidelines.
- Prepare and submit to DWR a Grant Completion Report.
- Prepare and submit a Post Completion Report for each of the projects after the first operational year of a project and in subsequent operational years.
- Communicate and coordinate with DWR as necessary and ensure all grant requirements are satisfied.

These tasks are further describes below. In general this project pertains to the District administering the Grant Agreement per DWR requirements.

Project Administration (Task 1) - Budget Category (a)

The purpose of this task is to keep the projects on track and to communicate project progress with DWR. Develop, negotiate, and secure all grant and funding agreements necessary for grant award and implementation, including the grant agreement with the Department of Water Resources (DWR) and the funding agreement with Project proponents: City of Paso Robles, The Land Conservancy, Upper Salinas-Las Tablas Resource Conservation District, Coastal San Luis Resource Conservation District, San Luis Obispo County, San Miguel Community Services District and San Simeon Community Services District.

Prepare quarterly invoices compiling all invoices and related documentation per project necessary to comply with the Grant Agreement. Project proponents will be providing this information to the District per Task 1 for each project.

Grant funding is being requested for this task.

Description	Schedule
DWR Grant Agreement	Upon grant award
Funding Agreements	Upon grant award
Grant Reimbursement Invoices	Quarterly

Labor Compliance Program (Task 2)

Consolidate and submit documentation regarding compliance with the Labor Compliance Plan requirements. Project proponents will be providing this information to the District per Task 2 for each project.

Grant funding is being requested for this task.

Deliverables:

Description	Schedule
Labor Compliance Documentation (as appropriate)	Upon Grant Award

Reporting (Task 3)

Monitor and communicate project and grant progress with DWR and prepare quarterly grant reports that describe the progress and accomplishments for the quarter, including an assessment of project schedule and budget, and updated schedules and budgets, if appropriate. The quarterly reports shall be prepared consistent with State grant guidelines and in accordance with Project Performance Monitoring Plans. Project proponents will be providing this information to the District per Task 3 for each project.

Following project close-out for each of the projects, prepare and submit to DWR a Final Project Completion Report summarizing the project implementation, demonstrating completion of all task items, and documenting the project costs and grant distributions. The final reports shall be prepared consistent with State grant guidelines.

Upon completion of all projects in the grant, submit to DWR a Grant Completion Report. The Grant Completion Report will be submitted within ninety (90) calendar days of submitting the Project Completion Report for the final project to be completed under the Grant Agreement. The Grant Completion Report shall include a brief description of each project completed and how they will further the goals of the IRWM Plan.

Submit a Post Completion Report for each of the projects. Post Completion Reports shall be submitted to DWR within ninety (90) calendar days after the first operational year of a project has elapsed. In subsequent operational years, all Post Completion Reports for projects completed

under this grant shall be submitted concurrently, and by the date specified in the grant agreement. This record keeping and reporting process shall be repeated, for each project, annually as specified in the grant agreement. The District has assumed Post Completion Reports are required for a total of 10 years after the completed project begins operation.

Grant funding is being requested for this task.

Deliverables:

Description	Schedule
Project Performance Monitoring Report	Upon grant award
Quarterly reports	Quarterly
Final Project Completion Report	90 days after each project completion
Post Completion Report	Annually for each project
Grant Completion Report	90 days after final project completion

Project Performance Monitoring Plan (Task 4)

This task includes all activities necessary to develop ehe Project Performance Monitoring Plan, implement the plan, and manage and share the data collected during the monitoring of projects included in this Proposal.

1.0.27 Project Performance Monitoring Plan (Task 4.1)

A Project Performance and Monitoring Plan (PPMP) will be prepared to ensure that grant submissions, as required by DWR to comply with the Grant Agreement, are submitted.

1.0.28 Monitoring Activities (Task 4.2)

As defined in the PPMP, the District will monitor the completion of the projects by submitting:

• Quarterly Progress Reports

1.0.29 Data Management and Sharing (Task 4.3)

No data management or sharing will be required beyond dissemination of the quarterly reports.

Land Purchase / Easement (Task 5) - Budget Category (b)

No land or easement purchases or dedications will be required of this project.

Deliverables: None

Assessment and Evaluation (Task 6) - Budget Category (c)

No Assessment and Evaluation will be required for this project.

Deliverables: None

Final Design (Task 7)

No Design will be required for this project.

Deliverables: None

Environmental Documentation (Task 8)

No Environmental Documentation will be required for this project.

Deliverables: None

Permitting (Task 9)

No Permitting will be required for this project.

Deliverables: None

Construction Contracting (Task 10) - Budget Category (d)

1.0.30 Construction Contracting (Task 10)

No Construction Contracting will be required for this project.

Deliverables: None

Construction (Task 11)

No Construction will be required for this project.

Deliverables: None

Environmental Compliance / Mitigation / Enhancement (Task 12) - Budget Category (e)

No Environmental Compliance/ Mitigation/ Enhancement will be required for this project.

Deliverables: None

Construction Administration (Task 13) - Budget Category (f)

No Construction Administration will be required for this project.

Deliverables: None